APPENDIX 6. Air Transportation Oversight System

TABLE OF CONTENTS

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APPENDIX 6. Air Transportation Oversight System

CHAPTER 1. ATOS OVERVIEW AND SYSTEM CONFIGURATION

SECTION 1. GENERAL

101. PURPOSE. This appendix establishes and describes the Air Transportation Oversight System (ATOS) as the system safety approach to Federal Aviation Administration (FAA) certification, surveillance, and certificate management.

102. DISTRIBUTION. This change is distributed to all addressees on the special distribution list, ZFS-840.

103. RESERVED.

104. EXPLANATION OF CHANGES. This revision is being issued as Change 33. This revision incorporates new flexibility that allows CMTs to apply ATOS policies and procedures more consistently for all air carriers. Recognizing that continuous improvement is a vital element in the system's effectiveness and responsiveness to FAA personnel, this change reflects a major revision to ATOS policies and procedures.

105. AUTHORITY TO CHANGE THIS APPENDIX. The Flight Standards Certification and Surveillance Division, AFS-900, has the authority to make changes to all ATOS policies and procedures, and in coordination with the Air Transportation Division, AFS-200, and the Aircraft Maintenance Division, AFS-300, may issue changes to this appendix necessary to implement and manage ATOS. The Director of Flight Standards Service, AFS-1, has the authority to approve changes that establish policy, delegate authority, or assign responsibility.

106. POLICY. ATOS is the FAA's business process for air carrier oversight. Exceptions to the requirements and standards described in this appendix must have the specific approval of AFS-1.

107. SCOPE. Effective October 1, 1998, the ATOS Surveillance process is used for the initial cadre air carriers and other carriers designated by AFS-1.

108. RELATED PUBLICATIONS. The surveillance program for all other Title 14 of the Code of Federal Regulations (14 CFR) part 121 certificated air carriers is conducted under existing guidance. This guidance includes the latest edition of the following publications:

a. National Program Guidelines (NPG);

b. Policies and procedures contained in Order 8400.10, Air Transportation Operations Inspector's Handbook, volume 6, Surveillance;

c. Policies and procedures contained in Order 8300.10, Airworthiness Inspector's Handbook, volume 3, Aircraft and Equipment; and

d. Other applicable FAA orders addressing surveillance of part 121 certificate holders.

NOTE: For the initial cadre air carriers and other air carriers designated by AFS-1, the policies

and procedures in this appendix take precedence over other published policies and procedures.

109. OBJECTIVES. The primary objectives of ATOS are to:

a. Improve the Certification and Surveillance processes for air carriers;

b. Ensure regulatory compliance and incorporate a systems approach targeted to address identified risks, based on a Comprehensive Surveillance Plan (CSP) for each air carrier, and managed by the principal inspectors (PI) and the Certificate Management Team (CMT);

c. Establish the planning, staffing, and training infrastructure needed to support a systems approach to surveillance;

d. Implement CMT-based surveillance planning and execution;

e. Integrate geographic inspectors into the Surveillance, Planning, and Implementation processes;

f. Standardize the Surveillance process to include Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI);

g. Re-engineer the inspection data collection and reporting process and system;

h. Enhance the Surveillance process to include structured evaluation of surveillance results;

i. Provide the inspection results data needed to support systems and root cause analysis.

110. RESPONSIBILITIES. All users of ATOS must use and maintain the system in accordance with the policies and procedures defined in this document. The following are other specific responsibilities for ATOS:

a. AFS-1 is responsible for the Flight Standards safety mission.

b. FAA Headquarters provides ATOS policy and procedures, and resolves issues.

c. Regional Offices (RO) implement ATOS and make sure that there are enough ongoing resources (e.g., funding and personnel). ROs also resolve issues that have been elevated by the certificate-holding district office (CHDO)/certificate management office (CMO).

d. The CHDO manages all CMT personnel who are employees of the CHDO. It also manages the certificate for its assigned air carrier.

e. The Flight Standards District Office (FSDO) manages all geographic inspectors assigned to CMTs who are not employees of the CHDO. The FSDO works with the CHDO/CMO to support the required CMT activities.

f. The Certification, Standardization, and Evaluation Team (CSET) CMO assists in the development of air carrier certification policy and procedures. The CSET CMO also assists field offices with new applicant certifications and the surveillance of non-ATOS air carriers.

g. The ATOS CMO collects feedback, assesses ATOS process effectiveness, and works to improve ATOS processes.

h. The System Process Audit Program Staff, AFS-40, conducts independent audits of ATOS processes.

111. ORGANIZATION. This appendix models the system safety approach by organizing each chapter according to safety attributes. Chapters 1 through 8 cover the eight process Modules. Chapter 9 contains links to figures and a list of ATOS acronyms and definitions.

112. - 121. RESERVED.

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SECTION 2. ATOS OVERVIEW

122. INTRODUCTION. The Air Transportation Oversight System (ATOS) process assesses the safety of air carrier operating systems using system safety principles, safety attributes, risk management, and structured system engineering practices.

123. ATOS MODEL. ATOS uses a system safety approach that is system-based and standardized. The ATOS system safety approach has checks and balances, emphasizes communications, and results in actions based on inspection data reporting, evaluation, and analysis.

124. ATOS TOOLS. ATOS uses structured, automated tools to develop a dynamic, flexible, air carrier-specific Comprehensive Surveillance Plan (CSP). The Air Carrier Assessment Tool (ACAT) looks for indicators of risk in the air carrier's systems. The results of the ACAT determine the frequency of inspections in the CSP.

125. ATOS SURVEILLANCE PROCESS. ATOS Surveillance assesses an air carrier against established performance measures in relation to specific regulatory requirements and safety attributes for each element of an air carrier's systems. The ATOS processes help aviation safety inspectors (ASI) identify potential weaknesses in air carrier systems. Because of the training and guidance inspectors receive, their inspection reports give greater insight into the overall state of the air carrier's systems. With the inspection report data, the Certificate Management Team (CMT) can better analyze the root causes of system deficiencies.

126. ATOS PROCESS MODULES. ATOS includes eight process modules, which are illustrated in figure 1-1. A description of each module follows.

a. System Configuration [1]. The purpose of System Configuration is to provide the infrastructure management activities that are vital to effective certification, certificate management, and surveillance. These activities occur before, during and after certification. They include:

(1) Developing and maintaining national certification baseline standards;

(2) Establishing the infrastructure for new entrant certification; and

(3) Maintaining and managing the certificates for all part 121 air carriers.

b. Certificate Management [2]. The purpose of Certificate Management is to:

(1) Assess the air carrier and evaluate assessment data;

(2) Develop a CSP; and

(3) Identify the CMT structure for managing certificates and supporting system safety analysis.

c. Surveillance Resource Management [3]. The purpose of Surveillance Resource Management is to provide the resources, funding, and training to support ATOS.

d. Surveillance Implementation [4]. The purpose of Surveillance Implementation is to implement the CSP. This module

describes how to conduct the inspections in the CSP.

e. Reporting [5]. The purpose of the Reporting process is to transfer into the ATOS Data Repository the inspection data gathered during Surveillance.

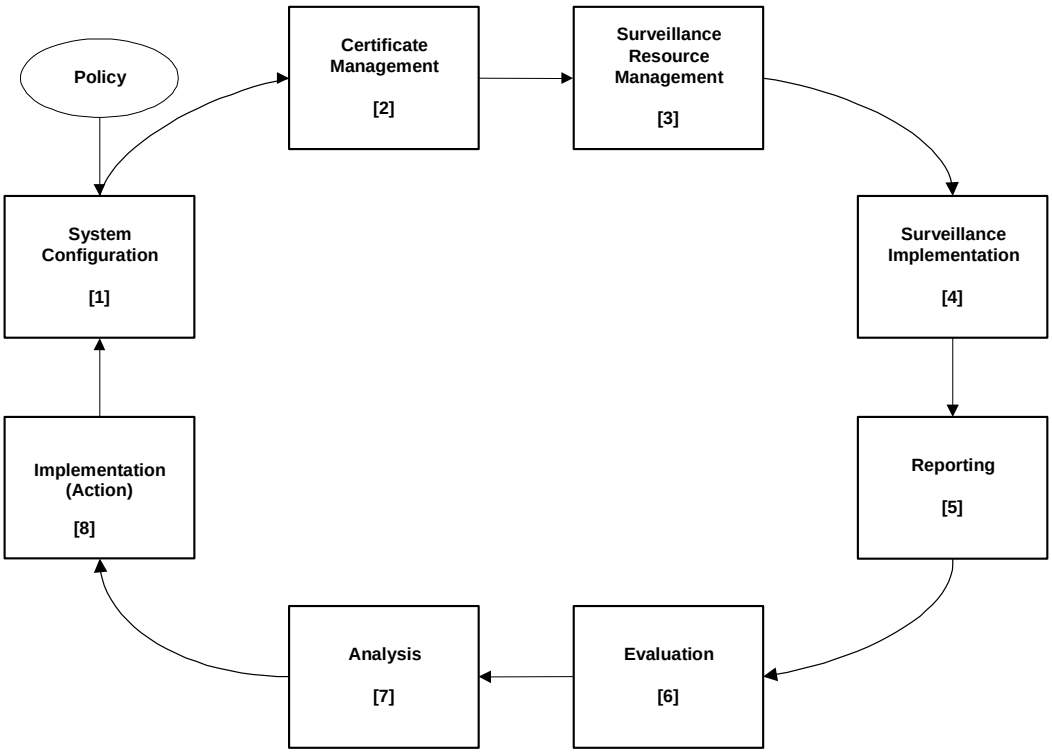
f. Evaluation [6]. The purpose of the Evaluation process is to make sure the inspection data meets ATOS Data Quality Guidelines.

g. Analysis [7]. The purpose of Analysis is to use the data collected through the Surveillance Implementation, Reporting, and Evaluation processes to provide CMT decisionmakers the information they need. The ATOS Analysis module organizes surveillance data and identifies which followup actions must be taken.

h. Implementation (Action) [8]. The purpose of Implementation is to take action as appropriate, based on all available information, including ATOS surveillance data.

Figure 1-1

ATOS PROCESS MODULES



127. SYSTEM SAFETY APPROACH. System safety is a multidisciplinary approach to systematically make a system, product, process, operation, or facility as safe as is practical. System safety covers the entire spectrum of activities from the design of hardware to the culture and attitudes of the people involved.

a. Definition of System Safety. System safety is the application of special technical and managerial skills to identify, analyze, assess, and control hazards and risks. In this approach, an entire system is viewed as an integrated whole. A "system" is a group of interrelated processes all operating in a specific environment to perform a specific task or achieve a specific purpose, support, or mission requirement for an air carrier. These processes are made up of people, procedures, materials, tools, equipment, facilities, and software.

b. Principles of System Safety. The principle of system safety is that safety is an inherent property of a system. Safety cannot be *inspected* into a system; it must be *designed* into a system. Risk identification, assessment, and management are critical aspects of system safety.

128. AIR CARRIER SYSTEMS, SUBSYSTEMS, AND ELEMENTS. ATOS uses a structured process to analyze how systems, subsystems, and elements interact. Seven air carrier systems form the basis for the ATOS system-based approach. Each of these systems has a defined set of subsystems and elements. Elements are interrelated activities or actions completed to support air carrier subsystems and systems.

a. The following are the seven air carrier systems:

(1) Aircraft Configuration Control is how an air carrier maintains the physical condition of the aircraft and associated components.

(2) Manuals System controls the information and instructions to define and govern the air carrier activities.

(3) Flight Operations pertains to aircraft movement.

(4) Personnel Training and Qualifications includes the processes that the air carrier uses to make sure its personnel are trained and qualified.

(5) Route Structures is the system by which an air carrier maintains facilities on approved routes.

(6) Airman and Crewmember Flight, Rest, and Duty Time prescribes time limitations for air carrier employees.

(7) Technical Administration is the system for addressing other aspects of certification and operation, such as key management personnel.

b. The following ATOS System/ Subsystem/Element chart, figure 1-2, identifies each of the systems, subsystems, and elements (along with associated inspector specialties) used in ATOS surveillance planning and execution.

Figure 1-2 – ATOS System / Subsystem / Element Chart
Airworthiness Elements

1.0 AIRCRAFT CONFIGURATION CONTROL	
1.1 Aircraft	
1.1.1	Aircraft Airworthiness
1.1.2	Appropriate Operational Equipment
1.1.3	Special Flight Permits
1.2 Records and Reporting Systems	
1.2.1	Airworthiness Release / Log Book Entry
1.2.2	Major Repairs and Alterations Records
1.2.3	Maintenance Log / Recording Requirements
1.2.4	Mechanical Interruption Summary (MIS) Reports
1.2.5	Mechanical Reliability Reports (MRR)
1.2.6	Aircraft Listing
1.3 Maintenance Organization	
1.3.1	Maintenance Program
1.3.2	Inspection Program
1.3.3	Maintenance Facility/Main Maintenance Base
1.3.4	Required Inspection Items (RII)
1.3.5	Minimum Equipment List (MEL) / Configuration Deviation List (CDL) / Deferred Maintenance
1.3.6	Airworthiness Directive (AD) Management
1.3.7	Outsource Organization
1.3.8	Control of Calibrated Tools and Test Equipment
1.3.9	Engineering / Major Repairs and Alterations
1.3.10	Parts / Material Control / Suspected Unapproved Parts (SUP)
1.3.11	Continuous Analysis & Surveillance (CAS)
1.3.12	Special Federal Aviation Regulation (SFAR) 36
1.3.13	Designated Alteration Station (DAS)
1.3.14	General Maintenance Manual or Equivalent
1.3.15	Reliability Program
1.3.16	Fueling
1.3.17	Weight and Balance Program
1.3.18	De-Icing Program
1.3.19	Lower Landing Minimums (LLM)
1.3.20	Engine Condition Monitoring
1.3.21	Parts Pooling
1.3.22	Parts Borrowing
1.3.23	Short-Term Escalations
1.3.24	Coordinating Agencies for Suppliers Evaluation (CASE)
1.3.25	Cargo Handling Equipment, Systems and Appliances

2.0 MANUALS	
2.1 Manual Management	
2.1.1	Manual Currency
2.1.2	Content Consistency Across Manuals
2.1.3	Distribution (Manuals)
2.1.4	Availability (Manuals)
2.1.5	Supplemental Operations Manual Requirements
4.0 PERSONNEL TRAINING AND QUALIFICATIONS	
4.1 Maintenance Personnel Qualifications	
4.1.1	Required Inspection Item (RII) Personnel
4.1.2	Maintenance Certificate Requirements
4.2 Training Program	
4.2.1	Maintenance Training Program
4.2.2	Required Inspection Item (RII) Training Requirements
4.2.8	Simulators / Training Devices
4.4 Mechanics and Repairmen Certification	
4.4.1	Recency of Experience
4.4.2	Display of Certificate
4.4.3	Privileges Airframe and Powerplant
4.4.4	Privileges and Limitations for Repairmen
5.0 ROUTE STRUCTURES	
5.1 Approved Routes and Areas	
5.1.1	Line Stations (Service & Maintenance)
5.1.2	Weather Reporting / Supplemental Aviation Weather Reporting System (SAWRS)
5.1.3	Non-Federal Navigational Aids (NAVAIDS)
5.1.4	Altimeter Setting Sources
5.1.8	Extended Range Operations with Two-Engine Airplanes (ETOPS)
5.1.9	Reduced Vertical Separation Minimum (RVSM) Authorizations
6.0 AIRMAN AND CREW FLIGHT, REST, AND DUTY TIME	
6.2 Maintenance Personnel	
6.2.1	Maintenance Duty Time Limitations
7.0 TECHNICAL ADMINISTRATION	
7.1 Key Personnel	
7.1.1	Director of Maintenance
7.1.2	Chief Inspector
7.1.3	Director of Safety
7.1.6	Maintenance Control

Figure 1-2, continued – Operations and Cabin Safety Elements

1.0 AIRCRAFT CONFIGURATION CONTROL		**4.0 PERSONNEL TRAINING AND QUALIFICATIONS**	
1.1 Aircraft		**4.2 Training Program**	
1.1.2	Appropriate Operational Equipment	4.2.3	Training of Flight Crewmembers
		4.2.4	Training of Flight Attendants
2.0 MANUALS		4.2.5	Training of Dispatchers
2.1 Manual Management		4.2.6	Training of Station Personnel
2.1.1	Manual Currency	4.2.7	Training of Check Airman and Instructors
2.1.2	Content Consistency Across Manuals	4.2.8	Simulators / Training Devices
2.1.3	Distribution (Manuals)	4.2.9	Outsource Crewmember Training
2.1.4	Availability (Manuals)	4.2.10	Aircrew Designated Examiner (ADE) Program
2.1.5	Supplemental Operations Manual Requirements	4.2.11	Training of Flight Followers
		4.3 Crewmember and Dispatch Qualifications	
3.0 FLIGHT OPERATIONS		4.3.1	Pilot Operating Limitations / Recent Experience
3.1 Air Carrier Programs and Procedures		4.3.2	Appropriate Airman / Crewmember Checks and Qualifications
3.1.1	Passenger Handling	4.3.3	Advanced Qualification Program (AQP)
3.1.2	Flight Attendant Duties / Cabin Procedures	**5.0 ROUTE STRUCTURES**	
3.1.3	Airman Duties / Flight Deck Procedures	**5.1 Approved Routes and Areas**	
3.1.4	Operational Control	5.1.5	Station Facilities
3.1.5	Carry-On Baggage Program	5.1.6	Use of Approved Routes, Areas and Airports
3.1.6	Exit Seating Program	5.1.7	Special Navigation Areas of Operation
3.1.7	De-Icing Program	5.1.8	Extended Range Operations with Two-Engine Airplanes (ETOPS)
3.1.8	Carriage of Cargo	5.1.9	Reduced Vertical Separation Minimum (RVSM) Authorizations
3.1.9	Aircraft Performance Operating Limits	**6.0 AIRMAN AND CREWMEMBER FLIGHT, REST AND DUTY TIME**	
3.1.10	Lower Landing Minimums (LLM)	**6.1 Airman and Crewmember Limitations**	
3.1.11	Computer Based Record Keeping	6.1.1	Scheduling / Reporting System
3.1.12	Hazardous Materials / Dangerous Goods Program	6.1.2	Flight Crewmember Flight / Duty / Rest Time
3.1.13	Other Personnel with Operational Control	6.1.3	Flight Attendant Duty / Rest Time
		6.1.4	Dispatcher Duty / Rest Time
		7.0 TECHNICAL ADMINISTRATION	
3.2 Operational Release		**7.1 Key Personnel**	
3.2.1	Dispatch or Flight Release	7.1.3	Director of Safety
3.2.2	Flight / Load Manifest / Weight and Balance Control	7.1.4	Director of Operations
3.2.3	Minimum Equipment List (MEL) / Configuration Deviation List (CDL) Procedures	7.1.5	Chief Pilot
		7.2 Other Programs	
		7.2.1	Safety Program (Ground and Flight)

129. SAFETY ATTRIBUTES. ATOS identifies safety attributes that should be present in well-designed air carrier systems. These attributes are critical to ATOS Certification and Surveillance processes. The following are the six safety attributes:

a. Procedures. There are documented methods for doing a process.

b. Controls. There are checks and restraints designed into a process to get a desired result.

c. Process Measurement. The air carrier measures and assesses its processes to identify and correct problems or potential problems.

d. Interfaces. The air carrier identifies and manages the interactions between processes.

e. Responsibility. There is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of a process.

f. Authority. There is a clearly identifiable, qualified, and knowledgeable person with the authority to set up and change a process.

130. ATOS SURVEILLANCE IMPLEMENTATION PROCESS. ATOS includes two types of inspections in the CSP: Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI). The SAIs and EPIs, as well as their related Data Collection Tools (DCT), are described in chapter 4.

a. Safety Attribute Inspections. SAIs assess the safety attributes associated with each system element for an air carrier. SAIs are planned at the subsystem level and performed by a team of inspectors or a single inspector. SAI DCTs should be used as a reference when principal inspectors (PI) consider air carrier program changes or approvals. Using these tools ensures both regulatory compliance and inclusion of safety attributes in air carrier programs.

b. Element Performance Inspections. EPIs are the ATOS inspections that determine that the air carrier follows its written procedures and controls, and meets its established performance measures for each system element. EPIs are planned and executed at the element level. Individual inspectors do EPIs

NOTE: Surveillance observations that are made outside of the normal CSP planning process are reported using the Dynamic Observation Report (DOR) or Constructed Dynamic Observation Report (ConDOR). See chapter 5 for a complete description of dynamic observations.

131. ATOS PROCESS FEEDBACK AND CONTINUOUS IMPROVEMENT. For ATOS to work as an effective oversight system, there must be an effective feedback loop. Inspectors should submit their concerns or recommendations using the Problem Reporting and Feedback feature in ATOS automation.

132. SYSTEM PROCESS AUDIT. The System Process Audit Program Staff, AFS-40, reports directly to the Director of Flight Standards Service, AFS-1. The audits will focus solely on the processes, not on the individuals who use the processes. Individual performance issues are not within the scope of the AFS-40 role. Audit results will be provided only to AFS-1 and the

ATOS certificate management office (CMO).

133. - 144. RESERVED.

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SECTION 3. ATOS SYSTEM CONFIGURATION

145. INTRODUCTION. Two major processes establish and maintain the infrastructure needed to conduct surveillance and manage the certificate. These two processes are System Configuration and Surveillance Resource Management. The System Configuration process consists of the planning and management that happens before, during, and after certification. These activities include:

a. Developing and maintaining national certification baseline standards;

b. Establishing the infrastructure for new entrant certification;

c. Maintaining and managing certificates;

d. Making sure that the Certificate Management Team (CMT) is established and functional before certification.

146. OBJECTIVE. This section defines the policies and procedures for the baseline staffing and training requirements of the Air Transportation Oversight System (ATOS).

147. RESPONSIBILITY. The assigned roles and responsibilities for System Configuration are described below:

a. The director of Flight Standards Service, AFS-1, provides and maintains national policy and guidance for CMT baseline training and staffing standards. AFS-1 also provides adequate regional resources to support ATOS processes.

b. The Flight Standards Certification and Surveillance Division, AFS-900, completes changes and updates for the System Configuration process.

c. AFS-500, Flight Standards Training Division, budgets for and ensures that the training needs are provided for configuration management.

d. Regional Offices (RO) allocate training and staffing resources to support ATOS processes.

e. The certificate-holding district office (CHDO)/certificate management office (CMO) provides the air carrier-specific familiarization portion of baseline training to all CMT members. The CHDO/CMO manager receives input from the principal inspectors (PI) and identifies other training needs for CMT inspectors. The office manager determines and requests staffing, as well as requests baseline training to support ATOS processes. The office manager also notifies the PI and data evaluation program manager (DEPM) of any changes in CMT staffing.

f. The Flight Standards District Office (FSDO) manager notifies the CHDO/CMO manager in writing if geographic inspectors will not be able to complete assigned work plans, and of any changes that would affect the CMT roster. Changes to geographic inspectors assigned to a CMT must be coordinated in writing at least 30 days before any change with the affected CHDO/CMO and region(s). FSDO managers request through their regions the staffing and baseline training of assigned geographic inspectors to support CMTs.

g. The PI reviews any changes to CMT staffing and training to determine if they affect the Comprehensive Surveillance Plan (CSP).

h. The DEPM maintains a CMT roster that accurately reflects CMT membership as active qualified, active non-qualified, or inactive. The DEPM makes changes to the CMT roster as requested by the CHDO/CMO manager.

(1) Active qualified members are assigned to the CMT and meet the baseline training requirements for their assigned position.

(2) Active non-qualified members are assigned to the CMT but have not completed baseline training requirements.

(3) Inactive members are no longer assigned or available to the CMT.

i. CMT members notify the DEPM of any change to their personal information (phone number, Federal Aviation Administration (FAA) e-mail address, or name change) that affects the CMT roster.

148. POLICY AND PROCEDURES. The System Configuration process includes common infrastructure management activities, such as developing and maintaining the staffing standards and training standards. These activities are vital to effective certification, certificate management, and surveillance. The following describes the System Configuration tasks required:

a. Develop and Maintain Baseline Staffing Requirements. The specific procedures for developing and maintaining national certification baseline staffing standards have not been developed in ATOS Phase 1. CMTs may include the following:

(1) CHDO/CMO Managers and Supervisors.

(2) Principal Operations Inspector (POI), Principal Maintenance Inspector (PMI), and Principal Avionics Inspector (PAI). Each principal may have one or more assistant principals.

(3) Cabin Safety Inspector (CSI). At least one CSI is assigned to each CMT and is located at the CHDO/CMO.

(4) Data Evaluation Program Manager. One DEPM is assigned to each CMT and is located at the CHDO/CMO. CMO managers may designate an alternate DEPM to act in the DEPM's absence. The DEPM reports to the first-line supervisor above the PI. The DEPM must be qualified as an air carrier inspector.

(5) Operations Research Analyst (ORA). One analyst is assigned to each CMT and is located at the CHDO/CMO. CMO managers may designate an alternate to act in the ORA's absence. The analyst reports to the CHDO/CMO manager.

NOTE: Vacancies in the above CMT positions may not go unfilled. Personnel should be named to act in required positions.

(6) Aviation safety inspectors (ASI) are located at the CHDO/CMO. All ASIs assigned to the air carrier certificate are members of the CMT.

(7) Geographic aviation safety inspectors (ASI-G) are located at, and report to, FSDOs. Geographic inspectors are assigned to be members of only one CMT. Continental United States, regional, or FSDO boundaries do not restrict conducting Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI). Geographic inspectors will not be restricted to conducting surveillance during regular office hours.

(a) Remotely-sited geographic aviation safety inspectors (RSI) can be located at the CHDO or can be located and supported in host offices other than the CHDO, but report directly to the geographic unit supervisor in the CHDO/CMO. The geographic unit may consist of a supervisor, team leader(s), and RSIs.

(8) Aviation Safety Technicians (AST). If ASTs are assigned to the air carrier certificate, then they are members of the CMT.

(9) Aviation Safety Assistants (ASA). If ASAs are assigned to the air carrier certificate, then they are members of the CMT.

(10) Certification, Standardization, and Evaluation Team (CSET). For five years after certification, CSET representatives act as members of CMTs that are established for new entrant air carriers.

b. Develop and Maintain Baseline Training Requirements. An individual may be assigned to a CMT before receiving baseline training. However, CMT members cannot be assigned or perform SAIs or EPIs until they have received the baseline training. The DEPM indicates on the CMT roster whether an ASI has completed baseline training. The baseline training requirements for all ASIs assigned to a CMT include:

(1) All courses of all phases of the initial or transition air carrier training string for the inspector's specialty;

(2) System safety course;

(3) ATOS training course; and

(4) The initial and recurrent air carrier-specific familiarization briefing. Additional guidance and a standard curriculum are contained in figure 1-3, Air Carrier-Specific Familiarization Briefings.

(5) On-the-job training (OJT) appropriate to the inspector's specialty in accordance with Flight Standards On-the-Job Training Guidance, issued July 17, 2002, and the Flight Standards Service National Training Program, Order 3140.20.

c. Other Training.

(1) All CMT operations inspectors will be programmed to receive initial training in an aircraft type operated by their assigned air carrier. CMT operations inspectors may be programmed to receive recurrent training as required by their assigned responsibilities. All CMT airworthiness inspectors will be programmed to receive initial systems training appropriate to their avionics or maintenance specialty in an aircraft type operated by their assigned carrier.

(2) All CSET operations inspectors will be programmed to receive either aircraft initial or recurrent flight training annually. All CSET maintenance and avionics inspectors will be programmed to receive aircraft systems training necessary to maintain knowledge of current technology on a variety of aircraft. All CSET inspectors will maintain expertise needed as required to provide technical assistance to FSDOs in the full range of certifications and evaluations conducted on part 121 air carriers.

(3) All RSIs will be programmed to receive the Remotely-Sited Inspector Indoctrination Course.

d. Establish New Entrant System Configuration. CSET assists in developing the configuration requirements to support certification of new entrant air carriers, and

assists the CHDO/CMO in certificating them, using a system safety approach.

149. CONTROLS. The controls built into the System Configuration process are described below.

a. PIs verify that CMT inspectors have completed baseline training before including them in the inspector work plan developed from the CSP.

b. Supervisors verify that the CMT inspectors they supervise have completed baseline training before assigning SAIs or EPIs to them.

c. Before sending the air carrier operating certificate to the region to sign, both the CHDO/CMO manager and CSET representative must agree that an adequately staffed CMT has been established.

d. Automation controls verify that an inspector who is reporting SAI and EPI data is a member of the CMT assigned to the air carrier under surveillance.

150. PROCESS MEASURES. The following process measures are used to confirm the success of the System Configuration process:

a. The CMT baseline training profile requirements are met.

b. The CMT baseline staffing requirements are met. These positions are continuously filled, using temporary assignments where necessary.

151. INTERFACES. The System Configuration process interfaces with the Certificate Management process and the Surveillance Resource Management process, so that the CMT has the supporting resources and training necessary to plan for and implement the CSP.

152. - 199. RESERVED.

APPENDIX 6. Air Transportation Oversight System

CHAPTER 2. CERTIFICATE MANAGEMENT

201. INTRODUCTION. The Certificate Management process provides the Certificate Management Team (CMT) with a structure for using risk management to develop a dynamic Comprehensive Surveillance Plan (CSP) for the air carrier.

a. Role of CMT. The CMT identifies potential system deficiencies by analyzing the air carrier's systems, subsystems, and elements. This risk management approach allows the CMT to dynamically target and retarget surveillance toward identified risks throughout the plan year.

b. Certificate Management Process. The Certificate Management process makes the surveillance of air carriers more systematic and targeted to deal with identified hazards and risks.

c. Related Publications. Guidance for certificate management work functions other than surveillance (e.g., issuance of operations specifications (OpSpecs), approval of minimum equipment lists (MEL)) is included in the inspectors' handbooks, other Federal Aviation Administration (FAA) orders, and advisory circulars (AC).

202. OBJECTIVE. This chapter provides the policies and procedures for the Surveillance Planning process. It also clarifies the roles and responsibilities of CMT members in developing the surveillance plan.

203. RESPONSIBILITY. The responsibilities for surveillance planning are identified below.

a. Director of Flight Standards Service, AFS-1, provides and maintains national policy and guidance for Flight Standards surveillance programs. AFS-1 also provides adequate resources to support the Certificate Management process.

b. The Flight Standards Certification and Surveillance Division, AFS-900, provides analytical, automation, and program support for the Certificate Management process.

c. Regional Offices (RO) provide resources to support the Certificate Management process, including surveillance planning and retargeting meetings.

d. The certificate-holding district office (CHDO)/certificate management office (CMO) manager is responsible for the Certificate Management process. The CHDO/CMO manager ensures that:

(1) The CMT develops and manages a CSP with inspections that are targeted to the highest risk areas as identified in the Air Carrier Assessment Tool (ACAT).

(2) Inspector resources are assigned to those highest risk areas first.

(3) If PIs do not assign inspector resources to the highest risk areas first, or inspection frequencies are elevated without adequate justification, then the manager works with the principal inspectors (PI) until these conditions are met or until the manager concurs with the CSP.

(4) The manager participates in the annual planning meeting, monitors and tracks the progress of the CMT in completing the

development of the CSP, and concurs with the completed surveillance plan.

e. Flight Standards District Office (FSDO) managers support the CMT and make sure that assigned geographic inspectors participate in annual surveillance planning meetings.

f. First-level supervisor of the Pls assigns a coordinator for the annual planning meeting.

g. PIs are responsible for the Certificate Management process and perform the following functions:

(1) Help the CMT meeting coordinator prepare for the annual surveillance planning meeting.

(2) Collect and organize information to complete an air carrier assessment, solicit input from team members, and make decisions about surveillance requirements.

(3) Identify the required inspectors for planned inspections and provide specific instructions for completing those inspections.

(4) Determine when surveillance retargeting is required based on analysis of the air carrier or other triggers such as accidents, incidents, or occurrences.

h. The CMT coordinator helps the PIs organize the annual surveillance planning meeting.

i. Cabin Safety Inspector (CSI). The CSI participates in the planning activities to develop the annual, and any retargeted, CSPs. With respect to their technical specialty area, they have joint responsibility with the principal operations inspector (POI) to approve and submit the ACAT.

j. Aviation Safety Inspectors (ASI). All CMT ASIs, including the data evaluation program manager (DEPM) and any Certification, Standardization, and Evaluation Team (CSET) representatives, participate in the planning activities to develop the annual, and any retargeted, CSPs.

k. Operations Research Analyst (ORA). The analyst collects, analyzes, and organizes associated air carrier data to complete surveillance planning and retargeting tasks. The analyst should work closely with the PI to ensure a thorough review of all pertinent data.

204. POLICY AND PROCEDURES. The following describes the Certificate Management tasks required to plan for surveillance. See chapter 9, figure 2-1, ATOS Surveillance Planning Guidelines, for additional instruction.

a. Prepare for the Annual Surveillance Planning Meeting.

(1) Designate a CMT Meeting Coordinator. Before any preparation for the annual surveillance planning meeting begins, the first-level supervisor to whom the PI reports designates a member of the CMT as coordinator. The supervisor makes this decision based on input from the PI. The CMT coordinator provides the organizational skills required for the CMT to work effectively as a team during the annual meeting.

(2) Pre-meeting Planning. Planning for the meeting should start early. The CMT coordinator and the PI define the roles and responsibilities for planning and conducting the meeting. They also determine:

(a) Task requirements;

(b) Date, time, and location;

(c) Logistics;

(d) Materials to be developed;

(e) Meeting objectives;

(f) Activities during the meeting;

(g) Products to be developed;

(h) Facilitators and recorders;

(i) Audiovisual and computer equipment needed;

(j) Internet access; and

(k) Onsite meeting responsibilities of all CMT members.

(3) Planning Session. The CMT coordinator and the PI should have a planning session with the office manager to review the final arrangements for the meeting and make sure it meets the specific needs of the CMT. The meeting location should have a large room to accommodate the entire CMT, and one or more breakout rooms for subgroup planning sessions. The CMT coordinator must notify CMT members of the meeting date and other logistics as early as possible.

(4) Agenda and Logistics. The CMT coordinator, with input from the PI, develops the meeting agenda, makes the logistical arrangements, and obtains other materials and equipment required to effectively conduct the meeting.

(5) Meeting Organization. The CMT coordinator and PI decide how to organize the CMT into subgroups (e.g., by specialty or by system/subsystem/element) so they can effectively accomplish the meeting objectives. Because the ACAT and CSP are organized by specialty, the minimum requirements are to have a subgroup for Operations and one for Airworthiness. However, integration of specialties within subgroups is highly recommended to provide a diversity of experience and knowledge. Following is an example of how to divide into subgroups:

(a) After the entire CMT meets together, they can divide into an Operations group (Operations and Cabin Safety CMT members) and an Airworthiness group (Avionics and Maintenance CMT members).

(b) Each Operations and Airworthiness group could then be divided into subgroups by systems or subsystems.

b. Collect Appropriate Information for the ACAT. The purpose of this process is to gather and evaluate the information needed for analysis and assessment of the air carrier. This data, along with the knowledge gained through certificate management experience for the assigned air carrier, should prepare the PI and CSI for the next step in the surveillance planning process.

(1) Access Policy and Guidance Information. With the help of the analyst and other CMT members, the PI and CSI access policy and guidance information, external information such as air carrier and industry data, surveillance queries, and other internal FAA databases and analytic data. This information collection activity should start well in advance of the annual surveillance planning meeting.

(2) Sources of Information. The following sources of information should be accessed:

(a) Air Transportation Oversight System (ATOS) Data Repository;

(b) Safety Performance Analysis System (SPAS), which uses data from a variety of sources to compare the current-to-past performance of an air carrier to its own record or to the average performance of the entire industry segment in which an air carrier is categorized;

(c) Program Tracking and Reporting Subsystem (PTRS);

(d) Automated Operations Safety System (OPSS);

(e) Vital Information Subsystem (VIS);

(f) Integrated Safety Information System (ISIS);

(g) Service Difficulty Reporting (SDR) Subsystem;

(h) Monthly Air Carrier Utilization and Propulsion Reliability Subsystem;

(i) Airworthiness Directive (AD) Subsystem;

(j) Team evaluation reports;

(k) Information gathered by the air carrier (e.g., Continuous Analysis and Surveillance (CAS), reliability reports, internal audits); and

(l) External information gathered from industry and the original equipment manufacturer (OEM).

c. Using the ACAT. The PI and the CSI use the air carrier data and statistical data to complete draft versions of the ACAT following the instructions contained in chapter 9, figure 2-2, Air Carrier Assessment Tool (ACAT), and the ATOS Automation User Guide.

(1) Description of the ACAT. The ACAT is an automated tool that allows the CMT to analyze and assess the elements of an air carrier's systems using a series of risk indicators. Chapter 9, figure 2-2, includes explanations for each of the risk indicators.

(2) Purpose of the ACAT. The purpose of the ACAT is to determine an assessment value. That value is used to maintain or increase the inspection frequency for each element contained in the CSP.

(3) Risk Indicators. The CMT uses risk indicators to assess the elements. The risk indicators are divided into two major categories: System Stability and Operational Risks. Each of the categories is divided into two subject areas.

(a) System Stability: Operational Stability. This subject area refers to organizational and environmental factors that the air carrier cannot directly control, but can manage effectively to improve system stability and safety.

(b) System Stability: Air Carrier Dynamics. This subject area refers to the organizational and environmental factors that the air carrier can directly control to improve system stability and safety.

(c) Operational Risks: Performance History. This subject area measures the results of the air carrier's operations over time.

(d) Operational Risks: Environmental Criticality. This subject area refers to those aspects of the air carrier's surroundings that may lead to or trigger a failure in one of its systems, subsystems, or elements, with the potential of creating an unsafe condition.

d. Completing the Draft ACAT. The following tasks are required to complete the draft ACAT:

(1) Mark Risk Indicator Columns. The PI/CSI complete their sections of the ACAT by marking a check in one or more of the risk indicator columns for each element where there is a concern that a problem or potential problem could contribute to a failure in that program or process. The PI should enter notes to explain why the check marks were made. Because the ACAT is designed from a system perspective, it should be completed on an element-by-element and row-by-row basis for each of the risk indicators. The PI and CSI can do this at one sitting, or they may need to return more than once to review the previously gathered data and the definitions of the risk indicators.

(2) Not Applicable (N/A) Elements. PIs can select "Marked Not Applicable" on the ACAT for an element that does not apply to the air carrier because it is not approved to conduct that type of operation (e.g. 5.1.8 Extended Range Operations with Two-Engine Airplanes (ETOPS). The element will not be available to the CMT at the CSP level but will be available at the Dynamic Observation Report (DOR) and Constructed Dynamic Observation Report (ConDOR) level. The Automation User Guide contains specific examples and instructions on the ACAT.

(3) Saving the ACAT as "Work-in-Progress" or "Draft." The POI and CSI complete the draft Operations ACAT. The principal maintenance inspector (PMI) and principal avionics inspector (PAI) complete the draft Airworthiness ACAT. While preparing the draft in ATOS automation, the ACAT status is "Work-in-Progress" and can be accessed only by the PI/CSI. Once the PI/CSI saves the ACAT as a "Draft," it is available for review by all CMT members. When the ACAT is saved as "Draft," a draft CSP is also produced based on the draft ACAT and is accessible to the PI.

(4) CMT Member Comments on ACAT. After saving the ACAT as "Draft," the PI notifies all CMT members that it is available for review. CMT members cannot change the check marks made by the PI, but they may enter comments on the draft in a dedicated comment field. The comments are accessible to all CMT members.

(5) Revisions to the Draft ACAT Based on CMT Member Comments. After considering all comments made by CMT members, the PI revises the draft ACAT, if necessary, prior to the annual surveillance planning meeting. The PI brings the revised draft versions of the tool to the annual surveillance planning meeting for review and discussion by the appropriate CMT subgroups.

e. Annual Surveillance Planning Meeting Activities. The primary purpose of this meeting is to develop the ACAT and the CSP. Other important goals for this meeting include:

- Building and improving team skills;
- Establishing team norms;
- Communicating CMT expectations; and
- Sharing information.

(1) Coordination and Communication. The CMTs must determine how they are going to communicate, because all team members are not located in the same place. It may be difficult for them to meet together as a total team more than once a year. Coordination and communication are key ingredients in building and maintaining a strong team environment, and are critical to the CMT's success. The CHDO/CMO manager is responsible for making

sure that the CMT members understand their roles and responsibilities.

(2) Attendance at the Annual Planning Meeting. All CMT members attend this annual meeting. Some members of the CMT may be required to meet more often if they need to retarget planned surveillance or to collaborate on other oversight issues.

(3) Structure and Format of the Meeting. The structure and format of the annual surveillance planning meeting varies by CMT. Plan the meeting with sufficient time to communicate overall CMT goals, expectations, and tasks, as well as to develop the CSP. Teambuilding is vital to conducting this meeting.

f. Finalize the ACAT. After the preliminary meeting activities, the CMT is divided into Airworthiness and Operations subgroups. The PI and CSI brief their subgroups about the air carrier information collected before the meeting and the comments received from CMT members on the draft ACAT. This information supports the subgroup's decisionmaking.

(1) Review the Draft ACAT in Subgroups. Each subgroup then reviews the appropriate draft version of the ACAT. The review process should allow for all subgroup members to share information and provide input to finalize the tools. Once the subgroup review is complete, the PI and CSI may or may not choose to modify the draft version based on the subgroup's input. The PI and CSI make any desired adjustments and review them for completeness.

(2) Review of Other Specialties' ACAT. Before saving the ACAT as "Final" the POI and CSI should review the completed draft version of the Airworthiness ACAT, and the PMI and PAI should review the completed draft of the Operations ACAT. This provides an opportunity to gain knowledge from a complete assessment of the air carrier. This information sharing may result in some adjustment to the ACAT before they are finalized, particularly for elements that involve both operations and airworthiness specialties.

(3) Saving the ACAT as "Final." The PMI, PAI, POI, and CSI are responsible for saving the ACAT as "Final." The ACAT Assessment Values are transferred through automation to the draft CSP.

g. Develop the CSP. The CSP documents the planned annual surveillance for the air carrier at the element level. The CMT uses the ACAT results to compile a surveillance plan specific to each air carrier. The CSP is a dynamic plan that can be changed at any time based on analysis of the air carrier or other triggers.

(1) Description of the CSP. The CSP is an automated tool that lists the air carrier surveillance elements and contains Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI) for Operations and Airworthiness. The ATOS Automation User Guide includes specific instructions and examples of the CSP.

(2) Identify and Record Surveillance Requirements. Both Operations and Airworthiness specialties must complete the CSP. The PI identifies and records the surveillance requirements for each specialty. The PIs use the ACAT assessment values and the recommended EPI Minimum Frequency as a guide to determine the scope and number of EPIs required to evaluate an element. The purpose of this evaluation is to determine if the air carrier is following its written policies and procedures, and if the process is achieving the desired result. Depending on the complexity of an air carrier element, PIs may determine

whether single or multiple EPIs are a sufficient evaluation. Chapter 9, figure 2-1, ATOS Surveillance Planning Guidelines, contains specific guidelines that all CMTs should follow when planning SAIs and EPIs.

(3) Identifying Inspectors to Accomplish Specific Inspections. To help the PI identify appropriate individuals for each inspection, CMT members may provide their employee training history to the PI. CMT members can get this report from their administrative officer. Because this report contains privacy act information, the submission of the report to the PI is strictly optional.

(4) PI Instructions. PIs should provide specific inspection instructions to ensure that inspection activities are performed at appropriate locations and at appropriate times to answer the questions on the Data Collection Tool (DCT) in a reasonably short timeframe. Instructions help the PI prioritize inspections and set timelines for starting and completing the activities. Instructions should include guidance on the type, location, and timing of inspection activities. The PI may request that the activities take place at specific locations or involve specific makes/models.

(5) Resources not Available. If the PI determines that there is insufficient CMT staffing to accomplish all inspections in the CSP, the PI elevates the issue via a memo to the RO through the CHDO/CMO manager for resolution. The RO, in coordination with other ROs, secures the necessary CMT staffing. If the RO of the CHDO/CMO cannot get additional CMT staffing, the CHDO/CMO manager elevates the issue via a memo to AFS-1 for resolution. If the required resources are not provided, and reallocation of work requests necessary to accomplish the CSP is not possible, the PI selects "Resource Not Available." Inspections designated as "Resource Not Available" remain in the CSP as planned but unassigned.

(6) Saving CSP as "Draft." After completing the appropriate parts of the CSP, the PI reviews the CSP and saves it as "Draft."

(7) Manager Concurrence. The CHDO/CMO manager for the CMT reviews and concurs with the "Draft" CSP.

(8) Saving CSP as "Final." After the CHDO/CMO manager concurs with the "Draft" CSP the PI saves it to "Final."

h. Submit Inspector Work Plans for Manager Review. After the CSP is finalized the PIs generate each inspector's work plan. These inspector work plans are provided to the inspector's manager through automation. The Automation User Guide contains detailed information about how this process works. The inspector's manager reviews the inspector work plan to determine if the resources to support it are available and adequate. Further guidance is included in chapter 3.

i. Determining the Need to Retarget Surveillance. Throughout the year, the CMT collects, reviews, reports on, and analyzes surveillance data. If surveillance data identifies a problem or other external events trigger an issue, the CMT must assess the information to decide if surveillance should be retargeted. Planned surveillance can be retargeted in two ways:

(1) Updating the ACAT. PIs will have the ability to update assessment values in the ACAT at any time. This can be done for the entire air carrier or for selected systems, subsystems, or elements. The end result of this process is an adjustment of affected assessment values or number of inspections as appropriate in the CSP. Both the PAI and the PMI for

airworthiness, and the POI and the CSI for operations must approve changes to the ACAT.

(2) Updating the CSP. PIs can add or change records, or delete records when no inspector work has been started at any time.

j. Maintenance of the CMT Roster. Information systems security requirements limit access to the ATOS Data Repository based on each employee's assigned roles and responsibilities. This is accomplished in the CMT rosters. The following procedures are followed when CMT roster information needs to be changed:

(1) The DEPM adds or deletes CHDO/CMO managers, supervisors, PIs, CSIs, DEPMs, and ORAs in the CMT roster when notified to do so by the CHDO/CMO manager.

(2) The CHDO/CMO manager notifies the PI and the DEPM of any change in CMT personnel resources.

(3) The FSDO manager notifies the CHDO/CMO manager when a geographic inspector is no longer available to the CMT, reports to a new supervisor, or is unable to complete his/her assigned inspector work plans.

(4) The PI determines if there will be any effect on the CSP when notified that an inspector is no longer available or unable to complete his/her assigned work plans.

(5) CMT members notify the DEPM about any of the following changes in their CMT roster information:

- E-mail address changes;
- Telephone number changes; or
- Name changes.

(6) The DEPM makes the changes to the CMT roster as directed by the CHDO/CMO manager. The DEPM will designate members as inactive when they are no longer assigned or available to the CMT.

k. Access to the ATOS Data Repository.

(1) Record Inspection Data. Only active CMT members can be selected to accomplish SAIs or EPIs and record inspection data.

(2) ACAT Saved as "Work-in-Progress." Only the PI and CSI can access an ACAT saved as "Work-in-Progress."

(3) Draft ACAT and CSP. All CMT members can read a "Draft" ACAT and enter text in the comment field. A "Draft" CSP (read-only) is also available for all CMT members to review.

(4) "Final" ACAT and CSP for a Specific Air Carrier. The "Final" ACAT and CSP for their assigned carrier are available in a read-only version to all CMT members.

(5) "Final" ACAT and CSP for all Air Carriers. The "Final" ACAT and CSP for all air carriers are available in a read-only version to authorized ATOS users not associated with an air carrier.

205. CONTROLS. The controls built into the Certificate Management process are listed below:

a. The team-based approach provides synergy as well as checks and balances.

b. CMT staffing shortfalls are documented in writing.

c. Geographic inspectors do not report to the CHDO/CMO.

d. A representative from each technical specialty, POI, CSI, PMI, PAI, approves and submits the ACAT to ensure that the entire system was evaluated for indications of risk.

e. The Assessment Value from the ACAT is automatically transferred to the CSP.

f. The Weighted Percentage from the ACAT is automatically transferred to the CSP.

g. Automation maintains an active/inactive roster of CMT members. Only active members may enter inspection data.

h. Automation ensures that only CMT members from the CMT roster may be selected to accomplish SAIs or EPIs.

i. Only authorized personnel can change the CMT roster.

j. Automation ensures that the EPI Minimum Frequency cannot be less than the EPI Frequency Baseline.

k. Automation ensures that only PIs can establish or modify the CSP.

l. CSET participates in the surveillance planning process for new entrant air carriers.

206. PROCESS MEASURES. The process measures used to confirm the success of the Certificate Management process are listed below.

a. The annual CSP was finalized and the inspector work plans were generated for approval and assignment.

b. Surveillance retargeting occurred as needed throughout the plan year, as shown by updates to the ACAT or the CSP.

c. CMT rosters accurately reflect the current information for all CMT members

207. INTERFACES. The Certificate Management process interfaces with the System Configuration process, the Analysis process, the Implementation process, and the Surveillance Resource Management process.

a. The System Configuration process provides the CMT members for the Certificate Management process.

b. The Analysis process provides the data necessary to plan inspection activities in the Certificate Management process.

c. The Implementation (Action) process provides retargeting requirements to the Certificate Management process.

d. The Certificate Management process provides the Surveillance Resource Management process with the inspector work plans.

208. - 299. RESERVED.

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APPENDIX 6. Air Transportation Oversight System

CHAPTER 3. SURVEILLANCE RESOURCE MANAGEMENT

301. INTRODUCTION.

a. Surveillance Resource Management is an ongoing process to make sure that there are adequate resources to accomplish the inspector work plans generated from the Comprehensive Surveillance Plan (CSP).

b. Purpose. The goal of this process is to make sure that there are adequate resources available at all times to support inspector work plans. By comparing inspector work plans and available resources, managers determine if more resources are needed to support the inspector work plan. Managers also assess needed resources based on any changes relating to implementation and retargeting of the CSP.

302. OBJECTIVE. This chapter provides the policies and procedures for the management of resources to support the CSP.

303. RESPONSIBILITY. Surveillance Resource Management roles and responsibilities are described below.

a. Director, Flight Standards Service, AFS-1, ensures that adequate resources are available to execute the CSP and resolves resource issues that are elevated by the Regional Offices (RO).

b. Regional Division Manager. The Regional Flight Standards Division managers ensure adequate funding is allocated to the Certificate Management Team (CMT) and resolve resource issues that are elevated by the field offices.

c. Office Manager. Office managers obtain and provide resources to support CSP development and accomplishment and System Analysis Team (SAT) participation described in chapter 8. This includes the travel funding.

(1) Work Priority. The primary work function and highest work priority of CMT members is accomplishing the Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI) identified in the CSP.

(a) Work Schedule Flexibility. Office managers must make sure that inspectors have enough flexibility in their work schedules to do these inspections.

(b) Work Assignments. Office managers ensure that additional work assignments (e.g., certification, investigation, technical administration, and other surveillance) do not prevent the inspector from accomplishing the inspector work plans generated from the CSP.

(c) CSP is the only Surveillance Work Program Assigned. Although additional surveillance work may occasionally be assigned, the inspections identified in the CSP will be the only annual surveillance work program assigned.

(2) Review of Inspector Work Plans. Managers review inspector work plans to identify any concerns with resource allocation.

(3) International Surveillance. The inspector's manager starts the process of getting an official passport for inspectors when the inspector work plan requires international surveillance.

d. Principal Inspector (PI). The PI identifies and requests additional resources to support the CSP.

304. POLICY AND PROCEDURES. The Surveillance Resource Management process begins when the CMT develops the CSP. The process continues throughout the year as changes occur. The tasks for Surveillance Resource Management are described below. See the Air Transportation Oversight System (ATOS) Automation User Guide for more information on the automated inspector work plan review process.

a. Review the Inspector Work Plan. The certificate-holding district office (CHDO)/ certificate management office (CMO)/ Flight Standards District Office (FSDO) manager receives the inspector work plan from the PI. The manager reviews the inspector work plan to identify concerns with the resource availability. During this review, the manager considers scheduled leave, scheduled training, training requirements, and other potential constraints. (See chapter 9, figure 3-1, Sample Cover Memo for Inspector Work Plan Submittal.)

b. Concur with Inspector Work Plans. If the resources are adequate to support the inspector work plan, the manager notifies the applicable PI that the inspector work plan has been reviewed and assigned. This notification is accomplished by selecting the "Concur" block on the Memo for Inspector Work Plan Submittal. The manager returns the memo to the PI and gives a copy to the inspector's immediate supervisor.

c. Assign Inspector Work Plans. The inspector's immediate supervisor assigns the work plan to the inspector. All items on the work plan are considered work requests until assigned by the inspector's supervisor. Only the PI can change an inspector work plan or redirect any work requests from one CMT member to another.

d. Non-Concurrence with Inspector Work Plans. If the resources are not adequate to support the inspector work plan, the manager notifies the applicable PI that the Inspector Work Plan has been reviewed and is not assigned. This notification is accomplished by selecting the "Non-concur" block on the Memo for Inspector Work Plan Submittal. The manager returns the memo to the PI and gives a copy to the inspector's immediate supervisor. Additional actions required by non-concurring FSDO and CHDO/CMO managers are described in paragraphs e. and f., below.

e. Additional Actions Required by Non-concurring FSDO Managers of Geographic Inspectors. If the manager of a geographic inspector reviews that inspector's work plan and decides that it cannot be supported, the manager must send a memo to the CHDO/CMO manager documenting the reasons for the decision.

(1) The FSDO manager must also send a copy of the memo to the regional division manager of that FSDO.

(2) The CHDO/CMO manager then contacts the FSDO manager to discuss the memo. They try to resolve the resource issue.

(3) If the FSDO manager and the CHDO/CMO manager cannot resolve the resource issue, then the CHDO/CMO manager forwards the memo to the

CHDO/CMO's division manager. The CHDO/CMO's division manager and the FSDO's division manager then attempt to resolve the resource issue.

(4) If the issue cannot be resolved between the regions, the CHDO/CMO's division manager produces a new memo to further elevate the issue, attaches the original memo, and forwards the package to AFS-1. The CHDO/CMO's division manager also sends a copy of this package to the CHDO/CMO. The CHDO/CMO manager tracks and maintains correspondence relating to the resolution of the resource issue.

(5) AFS-1 reviews the information and either provides the requested resources or documents why the resources cannot be provided to accomplish the inspector work plan.

(6) If the resources are provided, AFS-1 notifies the PI through the CHDO/CMO's regional division manager and the CHDO/CMO manager. The CHDO/CMO manager notifies the FSDO manager. The assigned inspector will be notified by his/her supervisor that the inspector work plan is in effect.

(7) If the resources cannot be provided, the reason is documented and forwarded to the PI through the CHDO/CMO regional division manager and the CHDO/CMO manager. The PI decides if reallocation of the SAI or EPI inspector work plans to other inspectors is possible. If reallocation of the work is not possible, the inspections remain in the CSP as planned but unassigned. This is done by selecting the "Resources Not Available" option.

f. Additional Actions Required by Non-Concurring Managers of CHDO/CMO Inspectors. If the manager of a CHDO/CMO inspector reviews that inspector's work plan and decides that resources are not adequate, the CHDO/CMO manager must send a memo to his/her regional division manager documenting the reasons.

(1) The CHDO/CMO manager also contacts the division manager to discuss the memo. They try to resolve the resource issue.

(2) If the issue cannot be resolved at the regional level, the division manager produces a new memo further elevating the issue, attaches the original memo, and forwards the package to AFS-1. The division manager also sends a copy of this package to the CHDO/CMO manager. The CHDO/CMO manager tracks and maintains correspondence relating to the resolution of the resource issue.

(3) AFS-1 reviews the information and either provides the requested resources or documents why the resources cannot be provided to accomplish the inspector work plan.

(4) If the resources are provided, AFS-1 notifies the PI through the CHDO/CMO's regional division manager and the CHDO/CMO manager. The assigned inspector is notified by his/her supervisor that the inspector work plan is in effect.

(5) If the resources cannot be provided, the reason is documented and forwarded to the PI through the CHDO/CMO's regional division manager and the CHDO/CMO manager. The PI decides if reallocation of the SAI or EPI inspector work plans to other inspectors is possible. If reallocation of the work is not

possible, the inspections remain in the CSP as planned but unassigned. This is done by selecting the "Resources Not Available" option.

g. Managing Resource Requirements. Based on changes in CMT assignments and/or modifications to the CSP, managers need to continually manage both inspector availability and travel funding requirements.

(1) Changing Concurrence with a Plan to Non-Concurrence. The manager may decide that the inspector work plans cannot be accomplished. The manager notifies the applicable PI immediately to discuss any concerns about getting the work done. The PI contacts the appropriate parties to resolve the resource issue. If necessary, the PI forwards the resource issue through the process identified in the previous sections.

(2) Incomplete Inspection Records Resulting from an Aviation Safety Inspector (ASI) Leaving the CMT. Managers must ensure that when an ASI is leaving the CMT all inspection records are finalized for the Evaluation process before the ASI's departure. If the ASI cannot complete the items that are in progress and leaves the CMT, the PI will notify the manager, with a copy to the data evaluation program manager (DEPM), initiating the removal process for an incomplete record. The PI will explain the circumstances along with a recommendation as to what action is required. If the manager concurs with the request, and the ASI has been designated as inactive by the DEPM on the CMT roster, the manager removes the record from the CSP. If the manager non-concurs with the request to remove the record from the ATOS Data Repository, the PI is notified and the reasons for non-concurrence are listed.

(3) Identifying Additional Training Requirements. When the PI identifies additional training requirements are needed for CMT members to support the CSP, the PI forwards a request to the inspector's manager following the established policies for training requests. This request is made using the prescribed form and must include the rationale for the request. If the inspector's manager denies the request, then the inspector's manager must respond to the PI with a memo explaining why the request was denied.

(4) Identifying Additional Staffing Requirements. If the manager needs additional permanent or temporary staff for the CMT, then the manager should follow current Federal Aviation Administration (FAA) policies and procedures for obtaining those individuals.

305. CONTROLS. The controls built into the Surveillance Resource Management process are described below:

a. The PI will not request, and supervisors will not assign, inspectors to conduct an inspection unless the baseline training requirements are met.

b. No one can change the planned inspections in the CSP because of a lack of resources.

c. Only the PI can redirect work requests from one CMT member to another.

d. CMT staffing shortfalls and additional training needs are documented in writing.

306. PROCESS MEASURES. The process measures used to confirm the success of the Surveillance Resource Management process are described below:

a. There are enough resources to accomplish the CSP, or procedures in this chapter are used to obtain enough resources.

b. Trained and qualified CMT members are assigned to accomplish CSP inspections.

c. Staffing and training is provided to support accomplishment of the CSP.

d. Current training records are available for all CMT members.

e. Written documentation exists when staffing shortfalls, inadequate travel funds, or additional training needs were identified.

307. INTERFACES. The Surveillance Resource Management process interfaces with the Certificate Management process, the Surveillance Implementation process, and the System Configuration process.

a. The Certificate Management process generates the inspector work plan.

b. The Surveillance Resource Management process reviews and assigns the inspector work plan for the Surveillance Implementation process.

c. The System and Configuration process provides the baseline training and staffing required for Surveillance Resource Management to allocate resources.

308. - 399. RESERVED.

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APPENDIX 6. Air Transportation Oversight System

CHAPTER 4. SURVEILLANCE IMPLEMENTATION

401. INTRODUCTION. The Surveillance Implementation process, when completed, gives the Federal Aviation Administration (FAA) an accurate, real-time, and comprehensive evaluation of the air carrier's safety status and compliance with Title 14 of the Code of Federal Regulations (14 CFR).

a. The Surveillance Implementation process uses the Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI) to provide the Certificate Management Team (CMT) a structure to coordinate, schedule, prepare, and accomplish the assigned inspector work plans.

b. SAIs and EPIs provide the information used by the FAA for assessing certificate holders' compliance with 14 CFR and for proactively identifying hazards. This information is used by the FAA to ensure that air carriers correct deficiencies that may impact aviation safety.

402. OBJECTIVE. This chapter describes the process a CMT will use to conduct surveillance on an air carrier, using the Comprehensive Surveillance Plan (CSP)-generated SAIs and EPIs.

403. RESPONSIBILITY. Roles and responsibilities in Surveillance Implementation are described below.

a. The certificate-holding district office (CHDO)/certificate management office (CMO) manager ensures that the CMT conducts surveillance using the SAIs and the EPIs in the CSP, in accordance with established priorities and timelines established by the PIs. The CHDO/CMO manager coordinates with CMT members' managers or supervisors on performance issues that affect CSP execution.

b. The first-level supervisor, either in a Flight Standards District Office (FSDO) or CHDO/CMO, ensures that the aviation safety inspectors (ASI) conduct their assigned work plans according to the principal inspector's (PI) specific inspection instructions.

c. PIs ensure that CMT members complete their individual work programs (IWP) in accordance with established priorities, timelines, and specific instructions. The PI resolves conflicts that result in the inability to accomplish an SAI or EPI.

d. SAI team coordinators (TC) organize and coordinate SAI team activities. The SAI TC informs the PI of any team member conflicts that could interfere with completing the SAI.

e. ASIs schedule, coordinate, and accomplish their assigned inspector work plans. Inspectors may work individually or as part of a team.

404. AUTHORIZED SURVEILLANCE.

a. Air Transportation Oversight System (ATOS) CMT Inspectors. For ATOS air carriers, only the following surveillance is conducted by CMT members:

(1) SAIs and EPIs identified in the CSP.

(2) Surveillance observations that are unplanned or requested by CMTs in response to specific areas of immediate concern outside of

the normal CSP planning process. See chapter 5 for a complete description of the Dynamic Observation Report (DOR) and Constructed Dynamic Observation Report (ConDOR).

(3) En route inspections should only be accomplished when there is no associated ATOS inspection activity. Unless an observation is made that can be reported using an SAI, EPI, or ConDOR, these en route inspections should be reported in the Program Tracking and Reporting Subsystem (PTRS) using the appropriate code (1624 or 1625 OPS, 3629 or 3630 A/W, 5629 or 5630 A/V).

b. Non-ATOS CMT Inspectors. Inspectors who are not assigned to an ATOS CMT are authorized to accomplish, and report in the PTRS, specific types of unplanned inspections on ATOS air carriers. These inspections will be limited to cases where inspection opportunities arise while conducting other work activities.

(1) Inspections other than those listed below are prohibited, however, this does not preclude an inspector from investigating any area that is a possible violation or a failure to follow the operator's procedures. The authorized inspections are:

(a) En route inspections, station facility, deice checks, ramp checks, trip records, cargo checks, spot checks, unapproved parts, fuel facility, contract maintenance, support facility, structural spot checks, and weather reporting/altimeter setting source checks.

(b) Surveillance on ATOS carriers to assess the effects of airline strike, labor unrest, and financial stress, under a plan developed with the concurrence of the CHDO, the Regional Office (RO), and the Flight Standards Certification and Surveillance Division, AFS-900, to conduct surveillance

(2) ASIs not assigned to an ATOS CMT should not communicate directly with carrier personnel about any perceived inadequacy in the carrier's approved systems or procedures. These concerns should be communicated to the PI. However, any safety concern that requires intervention must be addressed immediately with the appropriate company personnel. In cases where potential regulatory violations are discovered, it is essential that the coordination requirements of Order 2150.3A, current edition, be explicitly followed.

405. POLICY AND PROCEDURES. The following describes the Surveillance Implementation tasks required to accomplish SAI and EPI. (See chapter 9, figure 4-2, ATOS Surveillance Implementation Guidelines.)

a. Conducting SAI Surveillance Tasks. SAIs are completed by a team of inspectors or a single inspector who must be listed as the team coordinator. SAIs assess the safety attributes associated with each air carrier system element. SAIs are planned at the subsystem level and accomplished at the element level. Planning at the subsystem level is very important. It allows the SAI team to accomplish a related group of elements more efficiently by reducing redundancy and more effectively by the knowledge gained from related elements. The SAI TC plays an important role by organizing and coordinating all team activities. Chapter 9, figure 2-1, includes instructions on planning SAIs.

(1) SAI Team Coordination and Communication. The SAI TC decides how the team will communicate. Coordination and communication are especially important if all members are not at the same location. After reviewing the PI instructions, the TC will organize a team meeting. This meeting can be in person, over the phone, or by other means.

(2) Distribute and Schedule Tasks. The TC distributes tasks among the SAI team and develops a timeline to complete the assigned SAI subsystem or group of related elements. The tasks may be distributed by element, safety attribute, individual questions, or some combination.

(3) Prepare to Perform Assigned Inspections. Once the TC distributes inspection activities, each inspector must prepare for the inspection. Specifically, the inspector should review at a minimum:

(a) PI instructions;

(b) The Data Collection Tools (DCT), available online, for that SAI;

(c) The specific regulatory requirements (SRR) for the elements;

(d) Relevant FAA guidance, such as orders and advisory circulars (AC);

(e) Air carrier policies and procedures (e.g., manuals, operation specifications (OpSpecs), and training programs) for the element being inspected; and

(f) Any findings collected during surveillance on the associated EPI.

(4) Performing SAI Activities. Inspectors will follow the General Instructions for Completing Safety Attribute Inspections found in chapter 9, figure 4-3, Safety Attribute Inspections (SAI).

(a) Each inspector must perform the appropriate tasks to answer the questions they are responsible for on the DCT.

(b) Because the SAI team members perform specific tasks, the TC needs to monitor the progress of the inspection.

(c) The SAI TC works with the PI to resolve any conflicts or issues that could affect completing the SAI.

b. Conducting EPI Surveillance Tasks. EPIs are the ATOS inspections that determine if an air carrier follows its written procedures and controls for each system element, and meets the established performance measures for each system element. EPIs are planned for and executed at the element level and done by individual inspectors.

(1) Coordinate and Schedule Work Assignments. Inspectors must review their assigned inspector work plan and coordinate the inspection activities with their schedule. If necessary, the inspector contacts other team members—or the air carrier, if appropriate—to coordinate and/or confirm the logistical arrangements.

(2) Prepare to Perform Assigned Inspections. After the EPI is assigned, each inspector must prepare for the inspection. Specifically, the inspector must review at a minimum:

(a) PI instructions;

(b) The DCT, available online, for that EPI;

(c) The SRR for that element;

(d) Relevant FAA guidance such as orders and ACs;

(e) Air carrier policies and procedures (e.g., manuals, OpSpecs, and training programs) for the element being inspected; and

(f) Any findings collecting during surveillance on the associated SAI.

(3) Performing the EPI Activities. Inspectors will follow the General Instructions for Completing Element Performance Inspections found in chapter 9, figure 4-4, Element Performance Inspections (EPI).

(a) Every DCT lists certain tasks that should be completed during the inspection. Each task is made up of various activities.

(b) The number of surveillance activities required to properly assess a given element may vary considerably. Each inspector must do as many activities as necessary to accurately answer all the questions on the DCT. The inspector should obtain a sufficient amount of quality observations across varied times and locations to reflect the performance of the system element.

406. CONTROLS. The controls built into the Surveillance Implementation process are described below:

a. The DCTs have standardized tasks and questions that are associated with the applicable element.

b. Specific instructions provided by the PI for the assigned inspection.

407. PROCESS MEASURES. The process measure used to confirm the success of the Surveillance Implementation process is that inspectors perform assigned SAIs and EPIs in accordance with the PI specific instructions.

408. INTERFACES. The Surveillance Implementation process interfaces with the Surveillance Resource Management process, the Reporting process, and the Implementation (Action) process.

a. The Surveillance Resource Management process provides the inspector work plans to the Surveillance Implementation process.

b. The Surveillance Implementation process provides the inspection data for the Reporting process.

c. The Surveillance Implementation process interfaces with the Implementation (Action) process by identifying unsafe conditions or possible regulatory violations that require immediate action.

409. - 499. RESERVED.

APPENDIX 6. Air Transportation Oversight System

CHAPTER 5. REPORTING

501. INTRODUCTION. The Reporting process defines the method for transferring inspection data collected by the inspectors into the Air Transportation Oversight System (ATOS) Data Repository. Efficient and accurate inspection reporting is necessary for the effective accomplishment of the subsequent processes, Evaluation and Analysis. This process will ensure that all inspection records are properly recorded into the ATOS Data Repository, conform to the ATOS Data Quality Guidelines, and are available for evaluation.

502. OBJECTIVE. This chapter provides the policies and procedures related to the reporting of inspection data.

503. RESPONSIBILITY. Certificate Management Team (CMT) members and their assigned roles and responsibilities for chapter 5, Reporting, are identified below.

a. Flight Standards District Office (FSDO)/certificate-holding district office (CHDO)/certificate management office (CMO) managers make sure their inspectors record surveillance activities into the ATOS Data Repository in accordance with the policies and procedures in this appendix.

b. Safety Attribute Inspection (SAI) team coordinators (TC) submit a complete SAI record for each element they are assigned.

c. Aviation safety inspectors (ASI) enter surveillance results into the ATOS Data Repository. ASIs must ensure that data entered into the ATOS Data Repository meets ATOS Data Quality Guidelines. When reporting observations that are relevant to safety goals, but are unplanned or outside the Comprehensive Surveillance Plan (CSP), each inspector must submit reports using the Dynamic Observation Report (DOR) tool.

d. Aviation safety technicians (AST) and aviation safety assistants (ASA) who enter SAI or Element Performance Inspection (EPI) activities for CMT inspectors transcribe these observations completely and accurately into the ATOS Data Repository.

504. POLICY AND PROCEDURES. The following describes the tasks required to enter inspection data in the ATOS Data Repository. (See chapter 9, figure 5-1, ATOS Surveillance Reporting Guidelines.)

a. Activities Recorded in the ATOS Data Repository. All ATOS surveillance activities completed by CMT members are recorded in the ATOS Data Repository. A surveillance activity should never be entered in both the ATOS Data Repository and Program Tracking and Reporting Subsystem (PTRS). Any followup reporting (such as enforcement investigation or self-disclosure) would be reported in those systems.

b. Recording the Use of Form 8430-13. Activities that require the use of Form 8430-13, Request for Access to Aircraft, should be recorded in one of the following:

(1) The ATOS Data Repository, when the express purpose of being in the airplane is

to perform an SAI or EPI inspection activity or Constructed Dynamic Observation Report (ConDOR) activity; or

(2) PTRS for en route inspections, which do not involve any ATOS activities.

NOTE: The use of the form should NEVER be reported in both databases for the same surveillance activity.

c. Timely Recording of Surveillance Data. The inspection data should be entered into the ATOS Data Repository as soon as practicable after each surveillance activity is completed. Significant benefits result from recording this data immediately upon completion of the activity. Data not reported in a timely manner is of little value.

NOTE 1: Significant issues or items of immediate concern must also be verbally and promptly conveyed to the appropriate principal inspector (PI).

NOTE 2: Significant issues or items of immediate concern regarding all aspects of the air transportation of hazardous materials must be promptly conveyed to the appropriate PI who will coordinate with the regional hazardous materials branch manager in accordance with the guidance found in Federal Aviation Administration (FAA) Order 8400.10, Air Transportation Operation Inspector's Handbook, volume 2, chapter 3, section 5.

NOTE 3: Significant issues or items of immediate concern regarding all aspects of the carrier's Drug Testing Program and Alcohol Misuse Prevention Program must be promptly conveyed to the appropriate PI who will coordinate with AAM-800.

d. Accessing ATOS Automation to Enter SAI/EPI Data. The inspector who conducted the inspection activity, or an ASA or AST assigned to the CMT, enters the surveillance activity data into the ATOS Data Repository. See the ATOS Automation User Guide for detailed instructions.

e. Entering Common Data Field Information. The user enters information into all the common data fields that are relevant to the activity reported for this inspection.

(1) Mandatory Common Data Fields. At a minimum, every inspection activity must include Activity Start Date, Activity End Date, and Departure Point/Location.

(2) Guidance for each common data field is provided in the Automation User Guide and in the Data Quality Guidelines contained in chapter 9, figure 5-3, ATOS Data Quality Guidelines.

(3) Edits and Validation Checks. As the user enters the data, first-level data entry edit and validation checks are applied to the inspection data.

f. Activity Report. After entries are made into the common data fields, the user continues into the activity report where automation displays the element-specific DCT questions for the selected SAI or EPI. The user enters responses to only those questions that can be answered from the surveillance activity or observation accomplished.

(1) Entering responses to DCT questions. The questions are answered with either a "Yes," "No," or "N/A" (Not Applicable). If the inspector is unsure whether something observed was unsatisfactory or potentially unsatisfactory, the question should not be answered for that activity. The inspector must do additional research and/or plan another activity to make a definitive determination.

(2) "Yes" Response. The DCT questions are written so that "Yes" is always a favorable response. If the inspector selects a "Yes" response for a question, he/she may enter additional information in the "Yes comments" field. This comment field is not a mandatory field, but any entry must meet the ATOS Data Quality Guidelines.

(3) "No" Response. A "No" always indicates a negative response. For each "No" response, the inspector must provide an explanation that describes the observations causing the negative response. Explanations must be complete and descriptive, with as much information as necessary for someone knowledgeable with the air transport industry to understand without requiring further information.

(a) If the observation that resulted in a "No" response is an unsafe condition that would result in a possible accident or incident, or if a violation of the regulations is about to occur or has occurred, the inspector should intervene by bringing the observed condition to the attention of appropriate air carrier personnel and the PI. The inspector should then report the finding in the ATOS database. If the action taken involved an enforcement investigation, it would be tracked in PTRS, and the EIR number and the PTRS record identification number should be referenced in the "Inspector Action Taken" block and activity report closed as final.

(b) If the observation that resulted in a "No" response is not an unsafe condition that would result in a possible accident or incident, or does not involve a violation or potential of the regulation, then the inspector should enter a "No" response and include all appropriate data (who, what, when, where, how, etc.) in the explanation field.

NOTE: When reporting an EPI activity "No" response, the inspector should select an Air Transport Association (ATA) code and ATA 4-digit code from the drop-down menus. If there is no code relevant to the observation, leave the fields blank.

(4) "Not Applicable" Response. For some SAI or EPI questions, the "N/A" response may be displayed. This option is associated only with questions that are not applicable due to the types of operations authorized for the particular air carrier.

(5) Recording Actions Taken. If the reporting inspector performed any actions in response to observed deficiencies, the actions must be entered in the "Reporting Inspector Action Taken" field. Whenever a question is answered with a "No" response, the "Inspector Action Taken" field associated with that specific data reporting tool question is available. Actions may include, but are not limited to, the following:

(a) Notifying appropriate air carrier personnel of a potential non-compliance;

(b) Initiating an enforcement investigation;

(c) Consulting with air carrier personnel to effect an action; or

(d) Notifying the PI.

(6) PI Response Requested. If, on any inspection activity report, the reporting inspector would like to advise the PI to review the information submitted, the "PI Response Requested" box should be selected.

(a) The PI may then respond with comments in the "PI Comments" field.

(b) This function is not intended for use with time-critical information that needs a rapid response, since the information is not available to the PI until after it has been evaluated and released to the ATOS Data Repository.

(c) The PI may also enter comments in the "PI Comments" field as followup information to the inspection activity report.

g. Saving SAI/EPI Activity Reports. Users may save activity reports as "Work-in-Progress" or "Draft" or "Final."

(1) "Work-in-Progress." If the user enters some inspection data but is not able to complete the entry, the user may save the data entered as "Work-in-Progress."

(a) The user can, at a later time, bring up the inspection activity report and change or add new data. An activity saved as "Work-in-Progress" may be deleted by the reporting inspector.

(b) ASA and AST users who enter inspection data for CMT inspectors can save activities only as "Work-In-Progress."

(c) The reporting inspector must verify all the entries that are made by an AST or ASA and by saving the activity report as "Draft" or "Final" acknowledges the accuracy of those entries.

(2) "Draft." When the reporting inspector determines that the inspection activity report is complete and accurate, he/she may save the inspection activity report as "Draft." The inspector retains the ability to make changes to the report at this time, but activities saved to "Draft" cannot be deleted.

(3) "Final" Activity Reports. When the reporting inspector determines that the activity report is complete and meets the ATOS Data Quality Guidelines, they may select the "Final" option on the reporting screen. At this time, no changes can be made to the report.

(4) Save to Master Record. An inspection record is made up of individual inspection activity reports. For the inspection record to be complete and saved as "Final" all questions must be answered at least once.

(a) In the SAI reporting process, the SAI team coordinator (TC) reviews all inspection activity reports submitted by the SAI team members. After deciding the SAI record is complete, the TC selects the "Save to the Master Record" option on the "Detailed Report" screen. The entire record is then available to the data evaluation program manager (DEPM) for evaluation.

(b) In the EPI reporting process, the reporting inspector reviews the entire record for completeness and selects the "Save to Master Record" option on the "Detailed Report" screen. Now the entire record is available to the DEPM for review.

h. Reporting Dynamic Observations. The DOR and the ConDOR are used to record certain surveillance observations outside the comprehensive surveillance planning process. However, the DOR and ConDOR are not intended for routine use by CMT members to record surveillance activities outside the CSP. In addition, DORs and ConDORs are not a substitution for planned and targeted surveillance that is included in the CSP. CHDO/CMO managers should closely monitor the use of the DOR and ConDOR to ensure its proper use.

(1) Observations that may be reported using a DOR. Managers, supervisors, and inspectors use the DOR in the following situations:

(a) Single-activity observations unrelated to the ATOS system element they are inspecting.

(b) Unplanned observations when there is not an ATOS element that addresses the unique situation. The DOR may be used to record an unplanned observation on any ATOS air carrier.

(c) Observations that are related to the system element they are inspecting, but which are not covered by the DCT questions.

(d) Observations on specific inspection events as directed by a handbook bulletin or other national directive.

(2) Reporting DORs. There are two options when reporting DORs. The user must select the most appropriate format based on the nature of the observation or information being recorded. Data Quality Guidelines are applicable to both reporting options.

(a) Element Based Observation. This allows the user to record an unplanned observation for an existing element by answering the appropriate EPI DCT questions for a particular element. The user is not required to answer all available EPI questions, just the ones that are applicable to the observation.

(b) Other Observations. This allows the user to record data that is not related to existing elements or DCT questions. It contains common data fields and a text block for the inspector to describe what they observed and what actions they took as a result of the observation.

(c) When a DOR is saved, it is immediately available to all PIs and CMT managers and supervisors of the observed air carrier. It is sent to the DEPM of the observed air carrier for evaluation and is available for analysis to all operations research analysts (ORA). DORs are available to query along with EPI and SAI data.

(3) Observations that may be reported using ConDOR. The ConDOR is a special purpose DOR constructed with SAI and/or EPI questions, with instructions to inspect and report on specific areas of immediate concern. Only the inspector's immediate supervisor can assign ConDORs. The ConDOR should only be used for surveillance observations that are requested by a PI in response to specific areas of immediate concern outside of the normal CSP planning or retargeting process, such as labor unrest.

(4) Reporting ConDORs. All SAI and EPI questions must be answered and Data Quality Guidelines are applicable. When an inspector submits a ConDOR as final, it is immediately available to all PIs

and CMT managers and supervisors. It is sent to the DEPM for evaluation and is available for analysis to ORAs. ConDORS are available to query along with EPI and SAI data.

i. Access to ATOS Data Repository. Information systems security requirements determine each user's level of access to the ATOS Data Repository based on assigned roles and responsibilities.

(1) SAI and EPI Work-in-Progress. SAI and EPI activity reports that have been saved as "Work-in-Progress" are accessible only to the reporting inspector and AST or ASA assigned to the CMT tasked with inputting the data.

(2) SAI and EPI "Draft." SAI and EPI activity reports that have been saved as "Draft" are available in ATOS automation (read-only) to the reporting inspector's manager, supervisor, and in the case of an SAI, all members of the SAI team.

(3) SAI and EPI "Final." Activity reports that have been saved as "Final" are available for review by the reporting inspector's manager, supervisor, PIs, DEPM, and, in the case of an SAI, all members of the SAI team.

(4) DORs saved by the reporting inspector are immediately available to:

(a) The reporting inspector's manager and supervisors.

(b) All CMT members for the air carrier that was observed.

(5) Validated Surveillance Data. Once the SAI/EPI or DOR record has gone through the evaluation process, it is available (read-only) to anyone who is authorized to access the ATOS Data Repository.

505. CONTROLS. The controls built into the Reporting process are identified below:

a. Automation ensures that only the inspector who conducted the inspection activity (or an ASA or AST on the CMT) can enter inspection activities into ATOS.

b. ASA and AST users who enter inspection data for CMT inspectors can save activities only as "Work-In-Progress." The inspector who conducted the activity is the only person who can save an activity report as "Draft" or as "Final."

c. Only an SAI TC can save the SAI to the Master Record.

d. Only the reporting inspector can save the EPI to the Master Record.

e. Automation ensures that only the inspector assigned an SAI or EPI (or an ASA or AST on the CMT) can access inspection activity reports to input data.

f. Automation displays only those questions that are associated with the applicable element.

g. Automation ensures that all questions for an SAI and EPI record are answered at least once before they can be submitted for data evaluation.

h. Automation prevents users from saving an activity until an explanation has been entered for each "No" response.

i. Automation links all inspection activity reports to the corresponding inspection record.

j. Automation links all inspection records to the reporting inspector.

k. Data entry validation in the common data field minimizes data entry errors.

506. PROCESS MEASURES. The process measure used to confirm the success of the Reporting process is that all inspection records are properly recorded into the ATOS Data Repository and are available for evaluation.

507. INTERFACES. The Reporting process interfaces with the Surveillance Implementation and Evaluation processes.

a. Surveillance Implementation provides the inspection data to be reported.

b. The Reporting process yields the inspection records on which the Evaluation process is performed.

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APPENDIX 6. Air Transportation Oversight System

CHAPTER 6. EVALUATION

601. INTRODUCTION. The Evaluation process ensures that quality data has been entered into the Air Transportation Oversight System (ATOS) Data Repository. This process provides the Certificate Management Team (CMT) with the means to evaluate the data collected through surveillance by applying a structured process to ensure data quality. Initial validation is provided by the automation to ensure that valid data, specific to the assigned air carrier, is entered in data entry fields. The data evaluation program manager (DEPM) provides secondary validation and reviews all inspection records for the CMT.

NOTE: For clarification purposes, "inspection record" refers to Safety Attribute Inspection (SAI), Element Performance Inspection (EPI), Dynamic Observation Report (DOR), and Constructed Dynamic Observation Report (ConDOR) surveillance data collected by the CMT members.

602. OBJECTIVE. This chapter defines the evaluation process that a DEPM will use to ensure all inspection records in the ATOS Data Repository have been evaluated using the ATOS Data Quality Guidelines. The chapter also defines procedures the DEPM will use to maintain the CMT tables in the Data Repository that provide current and accurate information to the CMT.

603. RESPONSIBILITY. The roles and responsibilities in the evaluation process are listed below.

a. Managers ensure that inspectors submit inspection records that meet the ATOS Data Quality Guidelines.

b. The DEPM evaluates data that has been entered into the ATOS Data Repository using the ATOS Data Quality Guidelines. The DEPM also:

(1) Coordinates a resolution of any data discrepancies in the inspection record with the reporting inspector.

(2) Assists the principal inspectors (PI) and other CMT members in resolving issues regarding technical data input;

(3) Generates a monthly report of the DEPM non-concurrences that do not contain a PI comment;

(4) Maintains user access rights, the CMT roster, various lookup tables, and databases; and

(5) Works with the CMT, especially PIs, to develop, implement, and evaluate office processes to ensure that the inspection records meet the ATOS Data Quality Guidelines.

c. PIs review and comment on any inspection record that is saved to the ATOS Data Repository with a non-concurrence.

d. Aviation safety inspectors (ASI) reevaluate returned inspection records and decide on the appropriate action (e.g., editing the record, conducting additional observations, or taking no action).

604. POLICY AND PROCEDURES. The following describes the tasks required to evaluate inspection data.

a. Evaluation of Reports and Records. Certificate management office (CMO) managers may appoint an alternate DEPM to act in the DEPM's absence.

(1) The DEPM will access the ATOS Data Repository daily to determine if final activity reports or inspection records are awaiting evaluation.

(2) The DEPM should evaluate inspection records within seven calendar days from the date they become available. DEPMs and personnel acting as the alternate DEPM cannot evaluate data that they have entered into the Data Repository.

(3) The DEPM will review each activity report and inspection record using the ATOS Data Quality Guidelines.

NOTE: If the DEPM sees information that might be critical or time sensitive, the DEPM should tell the respective PI immediately.

(4) At the end of the evaluation process, the inspection record is available for analysis and viewing by all CMT members.

b. Non-Concurrence with Inspection Record. If the DEPM determines the data in the record does not meet the ATOS Data Quality Guidelines, the DEPM records all discrepancies in the "DEPM Comment" text box. The DEPM will then coordinate with the reporting inspector to resolve these discrepancies and return the inspection record to the inspector. The inspector should agree to make the changes or decline to make the changes, and save the inspection data to the Master Record within seven calendar days.

(1) Inspector Agrees to Make Changes. The reporting inspector may choose to make changes in the record. If so, after the changes are made, the record is returned to the DEPM for evaluation.

(2) Inspector Declines to Make Changes. The reporting inspector may determine that the inspection record meets the ATOS Data Quality Guidelines, retains the record in its original form, and returns it to the DEPM for evaluation.

NOTE: This process may occur multiple times with a single record.

(3) DEPM Records Comments. At the end of this process, if the DEPM concludes that the inspection record does not meet the Data Quality Guidelines, the DEPM will mark the inspection record as non-concurrence and enter comments explaining the reason for the non-concurrence.

(4) PI Reviews and Comments. The principal inspector reviews and comments on all inspection records that have completed the Evaluation process and do not have DEPM concurrence. This review will be accomplished within 30 calendar days from the date of the non-concurrence.

(5) Monthly Non-Concurrence Report. At least monthly, the DEPM provides each PI with a listing of all inspection records that received DEPM non-concurrence and do not include PI comments. The DEPM also provides a copy of this listing to the PI's manager.

c. Concurrence with Inspection Record. If the inspection record meets the ATOS Data Quality Guidelines, then the DEPM will mark the record as concurred.

d. CMT Table Management. The DEPM maintains certain tables in the Data Repository that provide current and accurate information to

the CMT. These include:

(1) The CMT roster based on an active CMT membership.

(2) The associated aircraft Make/Model/ Series lookup table.

(3) The aircraft registration N-number lookup table.

(4) The manager/supervisor database for the active CMT membership.

605. CONTROLS. The controls built into the Evaluation process are identified below.

a. Automation ensures that DEPM non-concurrence cannot be entered without explanation.

b. Automation ensures that only the inspector who entered information into the inspection record may change the inspection record.

c. Automation ensures that only the associated DEPM is authorized to add or change CMT roster information.

d. Automation will only display those records to the DEPM that are associated with the CMT.

e. Automation will only display to the DEPM those records saved to the Master Record by the reporting inspector.

606. PROCESS MEASURES. The process measures used to confirm the success of the Evaluation process are identified below.

a. All non-concur records from the DEPM have PI comments.

b. The CMT tables in the Data Repository contain current and accurate information.

c. All surveillance records meet the ATOS Data Quality Guidelines or have DEPM non-concurrence.

607. INTERFACES. The Evaluation process interfaces with the Reporting, Surveillance Implementation, and Analysis processes.

a. The Reporting process provides inspection data to be evaluated.

b. The Evaluation process may lead to additional Surveillance Implementation.

c. The Evaluation process yields quality data for the Analysis process.

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APPENDIX 6. Air Transportation Oversight System

CHAPTER 7. ANALYSIS

701. INTRODUCTION. The Air Transportation Oversight System (ATOS) Risk Management Process (RMP) is comprised of Analysis (ATOS Process Module 7) and Implementation (ATOS Process Module 8) processes. The Analysis process uses the results of the Certificate Management Team's (CMT) Surveillance Implementation, Reporting, and Evaluation processes to aid in risk management decisionmaking. When appropriate, the process also calls upon other available sources of data and information. The CMT uses these data to identify trends, deficiencies, and root causes. Once the analysis is complete, the principal inspector (PI) determines a course for Federal Aviation Administration (FAA) action in the Implementation (Action) process. During these activities, the air carrier has the primary responsibility for taking action on all safety problems.

702. OBJECTIVES. The ATOS Process Module 7 (Analysis) objectives are to:

- Provide the CMT with an effective way to identify, analyze, and assess risks so that they can be effectively managed.
- Provide CMT decisionmakers with a rational basis for decisionmaking, by understanding and structuring complex situations and using this understanding to predict system behavior and improve system performance.

703. RESPONSIBILITY. The CMT members and their assigned roles and responsibilities for Analysis are as follows:

a. Certificate-Holding District Office (CHDO)/Certificate Management Office (CMO). Office managers ensure that the CMT analyzes information regarding their assigned air carrier.

b. Principal Inspectors (PI). PIs identify and bring aviation safety concerns to the analyst's attention. PIs communicate their analysis needs to the CMT analyst.

c. Aviation Safety Inspectors (ASI). Inspectors identify unsafe conditions or possible regulatory violations observed during surveillance and make appropriate entries in FAA data systems (e.g., ATOS Data Repository, Program Tracking and Reporting Subsystem (PTRS)). They may also perform qualitative reviews of available data that falls within their subject matter expertise.

d. The Operations Research Analyst (ORA). The ORA provides information to guide the CMT in conducting system safety analyses. The ORA helps clarify safety issues by researching data and looking for trends, patterns, and generalizations. The ORA also helps to build effective sampling plans for data collection.

e. Data Evaluation Program Manager (DEPM). The primary responsibility of the DEPM is to evaluate data that has been entered into the ATOS Data Repository using the ATOS Data Quality Guidelines.

f. Flight Standards Safety Analysis Information Center (FSAIC). FSAIC provides guidance and support to CMTs on analytical matters.

704. POLICY AND PROCEDURES.

a. The System Safety Process.

(1) The system safety process assists the CMT in documenting identified hazards, conducting the risk analysis process, preparing an action plan, and validating the effectiveness of the action plan.

(2) PIs and other CMT members should focus on the carrier's system processes and systemic problems during Analysis (ATOS Process Module 7) and Implementation (ATOS Process Module 8). Systemic problems are those that indicate defects in the carrier's processes (e.g., missing procedures, poor controls, lack of attention to interfaces, etc.), poor performance of procedures, or patterns of repeated non-compliance with procedures.

b. Introduction to Analysis. The ORA conducts routine analyses of all data from the ATOS Comprehensive Surveillance Plan (CSP) (e.g., Safety Attribute Inspection (SAI), Element Performance Inspection (EPI), Dynamic Observation Reports (DOR) and Constructed Dynamic Observation Reports (ConDOR).

(1) While all answers provide information about the carrier's system processes, the "No" answers provide information about potential systemic problems that may indicate defects in the carrier's processes. All "No" responses require further analysis and evaluation before the CMT takes action.

(2) Analysts also assist the CMT in designing and executing special studies and analysis to support needs that are outside of the normal scope of the ATOS tools.

(3) The System Data Analysis Guide contains instructions for correlating data from the PTRS. More detailed information on analysis processes can be obtained from the System Data Analysis Guide, the Special Studies Analysis Guide, and the Data Collection Planning Guide.

c. Analysis for Risk Management. Hazards are situations, concerns, or other problems that have been evaluated in terms of risk. Analysis consists of three elements of the system safety process: Hazard identification, risk analysis, and risk assessment. A database of hazards, along with linkages to underlying ATOS data and planning tools, will be part of the ATOS automation toolset. At the end of the risk assessment procedure, the output of the process is a set of hazards and associated potential consequences, along with information on risk factors involved and an assessment of the level of risk severity and likelihood. This information will be provided to the decisionmaking process for the formulation of an action plan. These processes are covered in chapter 8.

(1) Hazard Identification. The first step of the analysis process is identification of a hazard and the potential consequences of that hazard.

(a) The PI will prepare a short statement describing the hazard. Emphasis should be on identifying and then managing systemic issues versus isolated findings.

(b) All members of the CMT should be alert for potential hazards and bring them to the attention of the PI. PIs will determine which issues will be entered into the RMP (Analysis—ATOS Process Module 7 and Implementation—ATOS Process Module 8).

(c) PIs may also use the RMP if, in their judgment, an issue is significant enough to justify intensive analysis and tracking. They may also use other processes for addressing the

hazard (e.g., EPI "Inspector Action" block, PTRS, Aviation Safety Action Program (ASAP) documents, Enforcement Investigative Report (EIR), etc.). Without conducting a complete analysis, PIs may also notify the air carrier of hazards that they deem to be isolated or minor. The ORA will continuously monitor available data sources to identify events, trends, or patterns that indicate potential safety problems. The ORA will review issues that are already entered into the automation system to avoid duplication and to identify any issues that may be related.

(d) Evaluating Potential Consequences. The PI or designated representative, with ORA support, evaluates the hazard condition for potential consequences. The potential consequences should address human error, equipment failure, or process breakdown that will be the direct result if the hazard is left alone. The PI or designated representative selects a potential consequence from a menu and provides additional detail, if desired.

(2) Risk Analysis. The second step in the analysis process is risk analysis. Risk is described in terms of severity, likelihood, and factors affecting each of them. The ORA and other CMT members analyze hazards to identify factors that affect the severity of the potential consequence and the likelihood of the consequence actually occurring. The air carrier may be able to provide data or other information to help identify risk factors affecting the hazard.

(a) Risk Factors. Identification of risk factors assists in risk assessment and provides specific targets for action plans. Factors are typically situational factors (e.g., specific make-model of airplanes, specific locations, etc.) or deficiencies in design or performance related to safety attributes (e.g., missing procedures or procedures not complied with). An effective action plan should address risk factors by eliminating them or by reducing their impact. If present, these factors may affect the severity of the potential consequence and the likelihood of the consequence actually occurring.

(b) Severity and Likelihood Values.

1. Severity Value. Severity is assessed along the levels in the standard Flight Standards Certification and Surveillance Division, AFS-900, risk matrix (High, Medium, Low). Severity assessments are produced using a combination of available data and expert judgment. Severity is defined using the following scale:

- High—Potential loss (or breakdown) of an entire system or subsystem, accident, or serious incident.
- Medium—Potential moderate damage to an aircraft, partial breakdown of an air carrier system, violation of regulations or company rules.
- Low—Potential poor air carrier performance or disruption to the air carrier.

2. Likelihood Value. Likelihood is assessed along the levels in the standard AFS-900 risk matrix (Frequent, Probable, Occasional, Remote). Likelihood assessments are produced using a combination of available data and expert judgment. Likelihood values are defined as follows:

- Frequent—Continuously experienced
- Probable—Will occur often
- Occasional—–Will occur several times
- Remote—Unlikely, but can reasonably be expected to occur

(3) Risk Assessment. The final step in the safety issue Analysis process is risk assessment. The automation computes an overall risk assessment number based on the matrix below. The automation uses the severity and likelihood values approved by the PI. The assessment number (1 through 12) determines the overall risk category (high, medium, or low overall risk), as noted below the matrix. This assessment is provided to assist the PI in decisionmaking, FAA action planning, and evaluation of air carrier actions.

	High	Medium	Low
Frequent	**1**	**3**	**5**
Probable	**2**	**6**	**8**
Occasional	**4**	**9**	**11**
Remote	**7**	**10**	**12**

Overall Risk Categories:

1-3 (Red) = High Overall Risk
4-9 (Yellow) = Medium Overall Risk
10-12 (Blue) = Low Overall Risk

(4) Air Carrier Notification. After the risk assessment step, the PI should inform the air carrier of the hazard and associated risk factors. PIs determine the scope and specific content of any information made available to the air carrier about the hazard. Any information included is intended to help the air carrier determine the appropriate action for the hazard.

(5) Action on Hazards and Associated Risk Factors. Following analysis, the system safety process proceeds to decisionmaking and action planning steps. These steps are covered in chapter 8, Implementation.

d. Other Analysis Tasks. In support of the CMT's analysis activities, various studies will be conducted. This section describes development of data collection plans and planning of focused inspections conducted by the CMT. The ORA and assigned ASIs, at the direction of the PI, will conduct these studies either in conjunction with routine CSP planning or in response to identified safety issues.

(1) Data Sampling Techniques for Data Collection Plans. Analyses that support decisionmaking should use data that are representative of the air carrier's systems and processes. This requires that enough valid data are collected to ensure that conclusions represent systemic, rather than isolated issues. A representative sampling of observations should be done by the CMT.

(a) Situations that can affect performance may vary at different locations, in different fleets, or with different outsource contractors. The data collection plan should account for these factors. This may entail taking multiple samples at multiple locations, times of day, etc.

(b) Sampling of data does not, however, always mean that a large number of observations must be taken in all cases. If a limited number of observations at selected locations provide data that are representative of the carrier's performance, visits to all locations may not be necessary, resulting in a savings of resources.

(c) The CMT ORA helps develop data collection plans, both in the case of the CSP and in the case of focused surveillance that addresses special issues. Additional information is contained in the Data Collection Planning Guide.

(2) Conducting Special Studies and Analysis. The PI may initiate a special study when the CMT determines that it needs to address an issue that is outside of the topics covered on standard SAI, EPI, or Constructed Dynamic Observation Report (ConDOR) tools. These studies may be used to support action items in an Implementation process, System

Analysis Team (SAT) effort, or other CMT requirements. A special study should follow the steps of the traditional research process. Assigned CMT members, with assistance of the ORA, should prepare an analysis plan.

(a) The first step defines the problem issue. The CMT must determine what it needs to know about the air carrier's processes, programs, performance, compliance in a particular area, etc. The ORA can help to scope this into a question that can be addressed through data collection and analysis.

(b) Second, the CMT should develop a tool to collect data. In most cases, this is a set of instructions or questions to be captured on a ConDOR.

(c) Third, the CMT should develop a data collection plan, as in paragraph a., above. DEPMs need to be aware of the objective of the plan, the information desired, and the requirements of the data collection plan.

(d) The ORA should develop an appropriate analysis method at the same time that the first three steps are being completed. The methodology in the study should have a specific problem definition, data collection method, data collection plan, and analysis methodology that are compatible. If statistical analysis is needed, the ORA can develop a statistical hypothesis. If qualitative analysis is to be used, the PI should define decision criteria.

(e) Analysis may require a joint effort on the part of the ORA and other assigned CMT members. If analysis requires interpretation of comments, the PI should assign inspectors of appropriate disciplines to help in reducing and analyzing data.

(f) If a formal report is required, such as to make a presentation to the air carrier to address a safety issue, the ORA should develop a format in the analysis plan, including design of appropriate graphical displays.

(g) More information on these tasks can be obtained in the System Data Analysis Guide, the Special Studies Analysis Guide, and the Data Collection Planning Guide.

705. CONTROLS.

a. The ORA and PIs conduct a review of open hazards on a regular basis. The CMT develops and implements a schedule for these reviews. The ORA also conducts a review of all deficiencies identified in the Data Repository that are not connected to an open hazard in conjunction with these reviews. Periodic reviews of closed or accepted items are also conducted to ensure that the status of these hazards has not changed.

b. The CMT enters and maintains hazards and associated process impacts, factors impacting risk severity and likelihood, and final risk assessments and related rationale in the automated system. The CMT uses the automation system as a means of documenting and tracking hazards.

c. Automation requires entry of system, subsystem, and/or elements associated with each hazard to ensure that a systemic focus is maintained. Analysts and PIs also review issues to ensure that only systemic problems are tracked through the system.

706. PROCESS MEASURES.

a. The automation system maintains completed RMP analyses in accordance with ATOS automation archival policies.

b. The CMT members review RMPs periodically for status in accordance with a schedule they establish.

c. The Analysis process is subject to periodic reviews by the CHDO manager or assigned designee.

707. INTERFACES. The ATOS Process Module 7 (Analysis) interfaces with ATOS Process Module 6 (Evaluation) for receipt of ATOS data and ATOS Process Module 8 (Implementation) for resolution and tracking of the RMP.

708. – 799. RESERVED.

APPENDIX 6. Air Transportation Oversight System

CHAPTER 8. IMPLEMENTATION (ACTION)

801. INTRODUCTION. The Implementation (Action) process is used by Certificate Management Teams (CMT) to ensure that certificate holders eliminate hazards or reduce risk levels.

802. OBJECTIVE. This chapter provides the policies and procedures related to the Risk Management Process (RMP).

803. RESPONSIBILITY. The CMT members and their assigned roles and responsibilities for chapter 8, Implementation (Action), are identified below.

a. Regional division managers allocate resources to support the RMP.

b. Certificate-Holding District Office (CHDO)/Certificate Management Office (CMO). Office managers provide the resources necessary to support the RMP.

c. Principal inspectors (PI) have the overall responsibility for the RMP.

d. CMT Members. Any aviation safety inspector (ASI) on the active CMT roster may be assigned to perform tasks associated with the RMP.

e. Operations Research Analyst (ORA). The ORA assists the CMT in the RMP by analyzing and evaluating data.

f. Data Evaluation Program Manager (DEPM). The DEPM evaluates data that has been entered into the Air Transportation Oversight System (ATOS) Data Repository using the ATOS Data Quality Guidelines.

804. POLICY AND PROCEDURES. The RMP described in this chapter is the method used to develop, report, and document the Implementation (Action) process. Detailed instructions for using the RMP are provided in the Risk Management User Guide. The RMP can be used to:

- Track the actions taken by the CMT to ensure that the certificate holder eliminates hazards or reduces risk levels.
- Track the actions of a System Analysis Team (SAT).

a. Begin RMP Development. The PI uses the RMP to ensure that the certificate holder addresses hazards forwarded from the analysis process and other sources based on:

(1) Analysis outcome;

(2) Local, regional, or national considerations;

(3) Timeliness of required actions; and

(4) Any other unique factors.

b. Select Approach. The PI/designated person selects one of the following three approaches for ensuring the certificate holder manages its risks. If the selected approach is "Monitor" or "Transfer," the PI may proceed to paragraph 804 i, Close RMP.

(1) Monitor. When the PI/designated person determines that no additional action is needed, the CMT continues to monitor the hazard through the normal ATOS surveillance.

(2) Transfer. When corrective action for the hazard is beyond the CMT's authority, the PI/designated person can allocate the authority, responsibility, and accountability for taking action to the appropriate Federal Aviation Administration (FAA) organization. Use "transfer" to track recommendations such as rule changes, new or revised airworthiness directives (AD), policy changes, and FAA safety recommendations.

(3) Mitigate. When action is needed to ensure that the certificate holder eliminates hazards or reduces risk levels, the supporting information from the Analysis process or other sources may help the PI/designated person determine the most appropriate mitigating strategies.

c. Document Rationale. The PI or designated person describes the reason for selecting the approach.

d. Develop Action Items. The PI or designated person describes the action items and identifies personnel resources necessary to ensure that the certificate holder manages the identified risks.

(1) Action Items describe what, how, where, and when an action should be done. Action items should be relevant to the selected approach and any actions the certificate holder takes to manage the identified risk. RMP action items should include any followup surveillance activities and data collection required to sufficiently document the completion of the action items and validation of the RMP outcome.

(a) "Monitor" Action Items—Continue with normal ATOS surveillance.

(b) "Transfer" Action Items—Record the steps taken to transfer the issue to the appropriate FAA organization. The PI/designated person may decide to conduct follow-up activities to follow-up on the status of the issue.

(c) "Mitigate" Action Items—Mitigation is usually carried out by the certificate holder with CMT oversight. However, sometimes the CMT may use mitigation strategies that do not involve the certificate holder. Mitigating strategies may include:

1. Reevaluate the certificate holder's programs, approvals, authorization, deviations, and exemptions.

2. Amend or revoke the certificate holder's authority to conduct all or part of its operation.

3. Initiate an enforcement investigation.

4. Convene a SAT. The SAT process is a collaborative effort in which the certificate holder, other non-FAA entities, and the FAA work together to determine causes and recommend possible solutions. It also ensures that feedback concerning actions is provided to applicable parties as part of the information sharing process. (See figures 8-1 and 8-2.)

(2) Personnel Resources. The PI or designated person recommends who or which technical specialty (operations, cabin safety, dispatch, airworthiness, or avionics) should perform each action item. If the recommended person does not report directly to the PI, the PI will coordinate with the person's supervisor.

(3) Identify FAA Resources. The PI or designated person documents any FAA resource shortfalls that could impact the accomplishment of the RMP. The PI uses the process in chapter 3, Surveillance Resource Management, to address resource shortfalls.

e. Review and Approve. After the PI approves the RMP, it is released for implementation.

f. Perform Activities. Each identified CMT member performs and reports their assigned action items.

g. Monitor RMP Progress. Throughout the course of the RMP, the PI/designated person monitors the progress of the action items to determine if it is time to move on to validation. You can move on to validation when:

(1) All action items are completed; and

(2) There are current data on hand that indicate the action plan has positively affected the hazard, including its risk factors.

NOTE: When sufficient current data are not available additional data collection activities should be accomplished (e.g., retarget the Comprehensive Surveillance Plan (CSP), Safety Attribute Inspection (SAI) or Element Performance Inspection (EPI), Dynamic Observation Report (DOR), ConDOR).

h. Validate RMP. The steps in validation represent a listing of the areas that must be considered in the validation process. Updates to these fields are not required and do not represent separate data collection. They are a review of prior steps to validate the effectiveness of the RMP.

(1) Review Hazard Description. Review the hazard description from the Analysis page and describe any changes that have occurred in the hazard as a result of the action plan.

(2) Update Consequence Categories. Review the selected consequence categories and any further description from the Analysis page and describe any changes that have occurred to the hazard's consequences because of the action plan.

(3) Update Risk Factors. Review the risk factor types and their descriptions from the Analysis page. Check if the certificate holder (or FAA) has addressed each factor and describe any changes that have occurred to the factors because of the action items.

(4) Update Likelihood Value. Using the data from the updated hazard description and updated risk factors, update the risk likelihood value.

(5) Update Severity Value. Using the data from the updated consequence categories, update the risk severity value.

(6) Update Overall Risk Assessment. The automated system will update the overall risk assessment based on the updated likelihood and severity values.

(7) Update Approach. Update your approach to addressing the hazard and its related risk factors.

(8) Update Approach Rationale. Review all your validation information and then summarize it as the basis for your selection of mitigate, monitor, or transfer as the approach. In your summary, consider describing the changes to the hazard and its related consequences, risk factors, likelihood and severity values, and overall assessment. Attach any documentation you might have to support your decision.

i. Close RMP. It is appropriate to close a RMP when the approach is "Monitor" or "Transfer" and the PI decides not to expend any additional resources beyond normal surveillance activities. The PI documents date of RMP

closure.

j. Review RMPs. The CMT should consider open and closed RMPs when modifying or creating a CSP.

805. CONTROLS. The controls built into the Implementation (Action) process are identified below:

a. The RMP is documented.

b. Action items are:

(1) Recorded in automation by the CMT member;

(2) Tracked by the PI/designated person; and

(3) Linked by automation to the corresponding RMP and the appropriate reporting CMT member.

c. Automation ensures that:

(1) Only the PI can approve a RMP for implementation;

(2) Only CMT members from the active CMT roster may be selected to accomplish RMP activities;

(3) Only the inspector assigned to a RMP action item, or a designated aviation safety assistant (ASA)/aviation safety technician (AST), can input data;

(4) Only the inspector who entered information into the RMP or an assigned ASA/AST may change that particular entry; and

(5) Only the PI can close a RMP and save it to the Data Repository.

806. PROCESS MEASURES.

a. The measure used to determine the success of the ATOS Implementation (Action) process is the elimination of hazards or reduction of risk levels.

b. The process is considered successful when subsequent surveillance and data analysis confirms that the hazard(s) were eliminated or the risk level(s) were reduced because of the Implementation (Action) process.

807. INTERFACES. The Implementation (Action) process interfaces with the Analysis, Certificate Management, and System Configuration processes.

a. The Implementation (Action) process receives hazard information from the Analysis process containing information on background, risk factors, and an assessment of the risk levels. This information is the basis for the RMP.

b. The Implementation (Action) process provides information to the Certificate Management process, and the Analysis process.

c. The Implementation (Action) process also provides input on possible changes to certificate holder configuration or CMT composition to the System Configuration process.

808. - 899. RESERVED.

APPENDIX 6. Air Transportation Oversight System

CHAPTER 9. FIGURES, ACRONYMS, AND DEFINITIONS

901. FIGURES ATTACHED TO THIS APPENDIX. The following figures are attached to this appendix.

a. Figure 1-3, Air Carrier-Specific Familiarization Briefings

b. Figure 2-1, Air Transportation Oversight System Surveillance Planning Guidelines

c. Figure 2-2, Air Carrier Assessment Tool

d. Figure 3-1, Sample Cover Memo for Inspector Work Plan Submittal

e. Figure 4-2, ATOS Surveillance Implementation Guidelines

f. Figure 4-3, Safety Attribute Inspection (SAI)

(1) Figure 4-3-1, Sample Safety Attribute Inspection (SAI) 1.x Data Collection Tool

(2) Figure 4-3-2, General Instructions for Completion of Safety Attribute Inspection (SAI) 1.x Data Collection Tools

g. Figure 4-4, Element Performance Inspection (EPI)

(1) Figure 4-4-1, Sample Element Performance Inspection (EPI) 1.x Data Collection Tool

(2) Figure 4-4-2, General Instructions for Completion of Element Performance Inspection (EPI) 1.x Data Collection Tools

h. Figure 5-1, ATOS Surveillance Reporting Guidelines

i. Figure 5-3, ATOS Data Quality Guidelines

j Figure 8-1, Sample Letter Requesting Participation on a System Analysis Team (SAT)

k. Figure 8-2, System Analysis Teams

902. OTHER FIGURES. The following ATOS figures are also attached to this appendix:

a. Figure 9-1, ATOS FOIA Policies and Procedures

b. Figure 9-2, Memorandum Regarding Release of ATOS Documents

903. ACRONYMS. The following acronyms are used by ATOS.

ACRONYM	DEFINITION
AC	Advisory Circular
ACAT	Air Carrier Assessment Tool
ACO	Aircraft Certification Office
ACRL	Air Carrier Reference Library
AD	Airworthiness Directive
ADE	Air Carrier Designated Examiner
AEG	Aircraft Evaluation Group
AFS	Flight Standards Service
AIR	Aircraft Certification Service
APM	Aircrew Program Manager
AQP	Advanced Qualification Program
A & P	Airframe and Powerplant
ASA	Aviation Safety Assistant
ASI	Aviation Safety Inspector
ASI-G	Geographic Aviation Safety Inspector
AST	Aviation Safety Technician
ATOS	Air Transportation Oversight System
AVR	Associate Administrator for Regulation and Certification
CARB	Commercial Airlift Review Board
CAS	Continuous Analysis and Surveillance
CASE	Coordinating Agencies for Suppliers Evaluation
CD	Air Carrier Dynamics
CFR	Code of Federal Regulations
CHDO	Certificate-Holding District Office
CMO	Certificate Management Office
CMT	Certificate Management Team
ConDOR	Constructed Dynamic Observation Report
CRM	Crew Resource Management
CSET	Certification, Standardization, and Evaluation Team
CSI	Aviation Safety Inspector, Cabin Safety
CSP	Comprehensive Surveillance Plan
DEPM	Data Evaluation Program Manager
DAS	Designated Alteration Station
DCT	Data Collection Tool
DOD	Department of Defense
DOR	Dynamic Observation Report
DOT	Department of Transportation
DRM	Dispatch Resource Management
EC	Environmental Criticality
ECM	Engine Condition Monitoring

ACRONYM	DEFINITION
EIR	Enforcement Investigative Report
EPI	Element Performance Inspection
ETOPS	Extended Range Operations with Two-Engine Airplanes
FAA	Federal Aviation Administration
FOIA	Freedom of Information Act
FSAIC	Flight Standards Safety Analysis Information Center
FSAS	Flight Standards Automation System
FSDO	Flight Standards District Office
FSF	Flight Safety Foundation
HAZMAT	Hazardous Materials
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ISIS	Integrated Safety Information System
ISP	Improved Surveillance Planning Process
IWP	Individual Work Program
LLM	Lower Landing Minimums
MEDA	Maintenance Error Decision Aid
MEL/CDL	Minimum Equipment List / Configuration Deviation List
MIS	Mechanical Interruption Summary
MRR	Mechanical Reliability Reports
NPG	National Program Guidelines
NPMC	National Program Management Committee
OAG	Official Airline Guide
OEM	Original Equipment Manufacturer
OPSS	Automated Operations Safety System
ORA	Operations Research Analyst
OS	Operational Stability
OST	Office of the Secretary of Transportation
OTNA	Operational Training Needs Assessment
PAI	Principal Avionics Inspector
PASS	Professional Airways Systems Specialists
PH	Performance History
PI	Principal Inspector
PMC	Program Management Committee
PMI	Principal Maintenance Inspector
POI	Principal Operations Inspector
PPM	Partial Program Manager
PQMI	Process Quality and Management Improvement
PTRS	Program Tracking and Reporting Subsystem
QMC	Quality Management Council
RASIP	Regional Aviation Safety Inspection Program
REDAC	Research, Engineering and Development Advisory Committee
RII	Required Inspection Items

ACRONYM	DEFINITION
RO	Regional Office
RSI	Remotely Sited Geographic Aviation Safety Inspector
RVSM	Reduced Vertical Separation Minimums
SAI	Safety Attribute Inspection
SAT	System Analysis Team
SAWRS	Supplemental Aviation Weather Reporting System
SDR	Service Difficulty Reporting Subsystem
SIP	Surveillance Improvement Process
SPA	System Process Audit
SPAS	Safety Performance Analysis System
SRR	Specific Regulatory Requirement
SUP	Suspected Unapproved Parts
VIS	Vital Information System
WAN	Wide Area Network
W & B	Weight and Balance

904. DEFINITIONS. The following definitions apply to this appendix.

TERM	DEFINITION
Acceptable Risk	An identified risk that is allowed to persist without further action. The decision to accept a risk is made with full knowledge of who is exposed to this risk.
Aging Aircraft	An aircraft of any make or model that is 15 years old or older.
Air Carrier Assessment Tool	A planning tool designed to analyze and assess the elements of an air carrier's systems using a series of risk indicators.
Air Carrier Dynamics	Aspects of the organization and environment that the air carrier directly controls and that could be used to enhance system stability and safety.
Air Carrier Programs and Procedures (3.1)	The subsystem by which an air carrier ensures compliance with its programs and procedures for functioning within its operating environment.

TERM	DEFINITION
Air Carrier System	A group of interrelated processes which are a composite of people, procedures, materials, tools, equipment, facilities, and software operating in a specific environment to perform a specific task or achieve a specific purpose, support, or mission requirement for an air carrier. For purposes of the new certification and surveillance processes, seven air carrier systems have been defined, including: • 1.0 Aircraft Configuration Control • 2.0 Manuals • 3.0 Flight Operations • 4.0 Personnel Training and Qualifications • 5.0 Route Structures • 6.0 Airman and Crewmember Flight, Rest, and Duty Time • 7.0 Technical Administration
Aircraft (1.1)	The subsystem by which an air carrier ensures its aircraft meet airworthiness and operational requirements and are safe for operations.
Aircraft Configuration Control (1.0)	The system by which an air carrier maintains the physical condition of the aircraft and associated components.
Airman and Crewmember Flight, Rest, and Duty Time (6.0)	The system that prescribes time limitations for air carrier employees.
Airman and Crewmember Limitations (6.1)	The subsystem by which an air carrier ensures airman/crewmembers meet the regulatory time limitations.
Analyst	The ATOS operations research analyst (ORA) responsible for assisting the CMT in collecting and analyzing air carrier data.
Approved Routes/Areas (5.1)	The subsystem by which an air carrier ensures it maintains the facilities to support its approved routes and areas of operation.
Authority Attribute	There is a clearly identifiable, qualified, and knowledgeable person with the authority to establish and modify a process.
Benchmark	A standard of measurement or evaluation that provides best-in-class performance results.
Build Specification	The specifications that the air carrier provides for maintenance, preventive maintenance, inspection of aircraft, aircraft engines, propellers, and appliances. The air carrier provides this specification to its own shop and to outsource providers

TERM	DEFINITION
Certificate Management Team (CMT)	The team responsible for the surveillance of a specific air carrier. The CMT will develop and execute a Comprehensive Surveillance Plan (CSP) tailored to an air carrier.
CMT Roster	A list maintained in ATOS Automation that accurately reflects CMT members as active or inactive. ▪ Active o Qualified - Members who are assigned to the CMT and meet the baseline training requirements for their assigned position. o Non-qualified – Members who are assigned to the CMT who have not completed baseline training requirements. ▪ Inactive o Members who are no longer assigned or available to the CMT.
Certification, Standardization, and Evaluation Team (CSET)	A team of national technical experts responsible for providing expert assistance to flight standards district offices (FSDO) in the full range of certifications and evaluations conducted on air carriers operating under Title 14 of the Code of Federal Regulation (14 CFR) part 121.
Comprehensive Surveillance Plan (CSP)	The carrier-specific surveillance plan developed by the CMT at the annual surveillance planning meeting. The CSP documents the planned annual surveillance for the air carrier at the system element level.
Constructed Dynamic Observation Report	The Constructed Dynamic Observation Report (ConDOR), allows surveillance activities to be requested or assigned with instructions to inspect and report on specific areas of immediate concern outside of the normal CSP retargeting process.
Control Attribute	There are checks and restraints designed into a process to ensure a desired result.
Crewmember and Dispatch Qualifications (4.3)	The subsystem by which an air carrier ensures crewmembers and dispatchers are qualified.
Criticality	The likelihood that a failure of an air carrier system, subsystem, or element could lead to an unsafe condition.
Data Collection Tool (DCT)	DCTs, such as EPIs and SAIs, are automated tools, used to record inspection findings. A significant feature of the ATOS automated tools is that the data recorded by them are then used to track and analyze air carrier safety performance.

TERM	DEFINITION
Data Evaluation Program Manager	The CMT member responsible for reviewing inspection reports and records to ensure they meet data quality guidelines.
Dynamic Observation Report	The Dynamic Observation Report (DOR) allows inspectors to record certain surveillance observations outside the comprehensive surveillance planning process.
Element	One or more interrelated actions completed to support an air carrier subsystem. Elements are the level at which Safety Attribute and Element Performance Inspections are applied to all part 121 carriers participating in ATOS.
Element Criticality Baseline	The criticality level defined as the standard for each element. It is categorized as High, Medium, or Low. ▪ High = A high likelihood that a failure in this element could lead to an unsafe condition. ▪ Medium = A moderate likelihood that a failure in this element could lead to an unsafe condition ▪ Low = A low likelihood that a failure in this element could lead to an unsafe condition.
Element Performance Inspection (EPI)	The ATOS inspection type designed to determine if an air carrier adheres to its written procedures and controls for each system element, and that the established performance measures for each system element are met. EPIs are planned for and executed at the element level and accomplished by individual inspectors.
EPI Frequency Baseline	The inspection frequency for each element is based on its Element Criticality Baseline value. High Criticality Baseline requires semiannual inspection frequency. Medium Criticality Baseline requires annual inspection frequency. Low Criticality requires triannual inspection frequency. — Semiannual = one EPI must be completed within six months of the last EPI completed in an element. — Annual = one EPI must be completed within one year of the last EPI completed in an element. — Triannual = one EPI must be completed within three years of the last EPI completed in an element

TERM	DEFINITION
EPI Minimum Frequency	This value is computed by applying the ACAT Assessment Value to the EPI Frequency Baseline. This value indicates the minimum inspection frequency for an element within the defined planning cycle. Assessment Values <11% do not change the inspection frequency. Assessment values greater than 11% increase the inspection frequency of triannual to annual; or the annual to semi-annual. Inspection frequency for an element cannot be lower than its Frequency Baseline
Environmental Criticality	Those aspects of the air carrier's surroundings that could lead to or trigger a failure in one of its systems, subsystems, or elements and potentially create an unsafe condition.
Flight Operations (3.0)	The system that pertains to aircraft movement.
Hazard	Anything, real or potential, that could make possible, or contribute to making possible, an accident.
High Criticality	A high likelihood that a failure in this element could lead to an unsafe condition.
Human Factors	The overall set of operating, system, safety, ergonomic, and environmental considerations that the air carrier has implemented to ensure the safety, health and well-being, motivation, happiness, and continued effectiveness and performance of its employees.
Identified Risk	A risk that has been identified through various analysis techniques.
Interfaces Attribute	The air carrier identifies and manages the interactions between processes.
Job Task Item	JTIs are bulleted items below many DCT questions to detail the tasks that may be performed to properly answer the question. The inspector is required to answer the higher-level EPI/SAI question, and should use the attached JTIs as guidance only.
Key Personnel (7.1)	The subsystem by which an air carrier ensures that qualified management and technical personnel with operational control are in place and conducting operations at the highest level of safety.
Low Criticality	A low likelihood that a failure in this element could lead to an unsafe condition.
Maintenance Organization (1.3)	The subsystem by which an air carrier ensures the continuous airworthiness and servicing of aircraft in accordance with its approved procedures.

TERM	DEFINITION
Maintenance Personnel (6.2)	The subsystem by which an air carrier ensures maintenance personnel meet duty time limitations.
Maintenance Personnel Qualifications (4.1)	The subsystem by which an air carrier ensures maintenance personnel are properly certificated and authorized to perform assigned duties.
Manual Management (2.1)	The subsystem by which an air carrier prepares and maintains the manuals for the use of and guidance to its personnel.
Manuals (2.0)	The system for controlling the information and instruction that defines and governs air carrier activities.
Mechanics and Repairman Certification (4.4)	The subsystem by which an air carrier ensures that airmen, who approve aircraft for return to service, are properly certificated.
Medium Criticality	A moderate likelihood that a failure in this element could lead to an unsafe condition.
Metrics	A specific method to measure the results of the surveillance implemented for a specific carrier based on a customized plan.
New Entrant Carrier	An air carrier that has conducted operations under part 121 for less than five years.
Operational Control	Operational control with respect to a flight refers to the exercise of authority over initiating, conducting, or terminating a flight.
Operational Release (3.2)	The subsystem by which an air carrier ensures all activities required for safe dispatch and continuation of a flight to its destination.
Operational Risk	An identified risk that has the potential to affect the operations of the air carrier.
Operational Stability	Those aspects of their organization and environment over which the air carrier has no direct control and that, when managed effectively, could enhance system stability and safety.
Outsourcing	The practice of contracting out internal air carrier programs and processes, such as maintenance, training, and ground handling, to external, independent vendors and suppliers, where oversight for the quality of the outsourced items remains with the air carrier.

TERM	DEFINITION
Performance Assessment	Group of one more EPIs and associated activities completed within the same time period for the purpose of evaluating the performance outcomes of a process or program at the element level.
Performance History	The results of the air carrier's operations over time.
Performance Measure	A description of the desired outcome of an air carrier element process, used to determine if the desired results of that process were achieved.
Personnel Training and Qualifications (4.0)	The system by which air carrier personnel are trained and qualified.
Procedures Attribute	There are documented methods for accomplishing a process.
Process	Linked activities designed to produce a desired result or end product for an air carrier.
Process Measurement Attribute	The air carrier measures and assesses its processes to identify and correct problems or potential problems.
Records and Reporting Systems (1.2)	The subsystem by which an air carrier manages the records used to show the aircraft are airworthy; that reflect the air carrier's use of its procedures; and that ensure the issuance of required reports.
Responsibility Attribute	There is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of a process.
Risk	An expression of the probability and impact of an undesired event in terms of event severity and event likelihood.
Risk Indicator	A grouping of safety and/or performance-related data that reflects an area of potential risk which is expected to have sufficient data or justification to calculate a representative value for a particular air carrier system, subsystem, or element.
Risk Management	An interactive management activity dedicated to assuring that risk is identified, documented, eliminated, or controlled within defined program risk parameters.
Route Structures (5.0)	The system by which an air carrier maintains facilities on approved routes.
Safety	The quality of a system that allows the system to function under predetermined conditions with an acceptable level of risk.
Safety Attributes	The authority, responsibility, procedures, controls, process measurements, and interfaces that the air carrier has designed into its systems.

TERM	DEFINITION
Safety Attribute Inspection (SAI)	The ATOS inspection type designed to appraise the quality of the safety attributes, i.e. (procedures, controls, process measurement, and interfaces, responsibility, authority) associated with each system element for an air carrier. SAI are executed at the element level, usually planned for at the subsystem level, and accomplished by a team of inspectors.
SAI Team	The team of inspector(s) or a single inspector assigned to accomplish an SAI for a specific CMT and air carrier. SAI Team is also a column on the CSP-SAI indicating the inspector(s) for the SAI inspection as well as the location for the SAI inspection and any other specific instructions necessary for the inspector(s) to properly complete the SAI inspection.
System	A group of interrelated processes which are a composite of people, procedures, materials, tools, equipment, facilities, and software operating in a specific environment to perform a specific task or achieve a specific purpose, support, or mission requirement for an air carrier.
System Analysis Team	A team that includes participants from the Certificate Management Team (CMT), the air carrier, other FAA organizations, and other non-FAA entities (e.g., the manufacturer), as required, to accomplish further analysis and determine root causes of system deficiencies or potential system deficiencies.
System Approach	The structured, safety-driven means by which the FAA will certificate and conduct surveillance on elements that are designed to interact predictably within the air carrier's systems and subsystems.
System Safety	The application of special technical and managerial skills to identify, analyze, assess and control hazards and risks associated with a complete system. System safety is applied throughout a system's entire lifecycle to achieve an acceptable level of risk within the constraints of operational effectiveness, time, and cost.
System Safety Analysis	An activity designed to quantify air carrier systems through modeling and analysis of its subsystems and assessment of their processes and procedures to explore and understand the interactions of the safety elements.
System Stability	The state of balanced constancy and safety that results when an air carrier is able to effectively manage both the aspects of their organization and their environment; those they control directly and those over which they have no direct control.

TERM	DEFINITION
Technical Administration (7.0)	The system for addressing all other aspects of air carrier certification and operations.
Training Program (4.2)	The subsystem by which an air carrier ensures personnel are trained to perform assigned duties in accordance with the air carrier's approved programs.
Unacceptable Risk	That risk which cannot be tolerated by the managing activity. It is a subset of identified risk that must be eliminated or controlled.

Figure 1-3. Air Carrier-Specific Familiarization Briefings

This figure provides guidance for standardized air carrier-specific familiarization briefings, as part of the baseline training requirements for Air Transportation Oversight System (ATOS) Certificate Management Teams (CMT).

Background

The FAA Deputy Administrator's 90-Day Safety Review was conducted during the summer of 1996. It examined areas of immediate concern to the agency, especially with respect to safety inspection, and made recommendations that could be implemented in the near term. Recommendation 2 of the 90-Day Safety Review directed Flight Standards to "*Improve air carrier guidance systems and follow-up activities to mitigate safety risks and increase the leverage of FAA resources. Ensure that safety information reaches the right people at the right time and continue efforts to improve data quality and analysis.*" ATOS was developed in response to that recommendation.

In 1998, the Flight Standards Service director sent a memorandum requiring the ATOS certificate management offices (CMO) to provide carrier-specific training to the geographic inspectors assigned to the CMTs. Although the memorandum outlined several content areas that were to be addressed during these sessions, there was little standardization among the ten ATOS CMOs. AFS-500 was directed to formalize this training with the ATOS program office and representatives from the ATOS CMO.

Air Carrier-Specific Familiarization Briefings Policies and Procedures

A formal training course is not feasible due to the uniqueness of each air carrier's operations. However, to ensure that the information each CMT member receives is of sufficient quality and depth, ATOS CMOs will use the following policies and procedures to plan, conduct, and document initial and recurrent air carrier-specific familiarization briefings. These briefings will be provided to each CMT member on initial assignment to the CMT. They may be conducted one-on-one or for a group of new CMT members at the option of the office manager. On a yearly basis, generally at the annual planning meeting, CMT members will receive briefings in applicable subjects to refresh their knowledge and be made aware of any significant changes in the air carrier's operations.

a. Outline of Subjects: This figure contains an outline of subjects that should be covered during initial and recurrent briefings, as appropriate to the specific air carrier, and recommended minimum programmed hour requirements. Additional subjects may be included, at the discretion of individual CMOs.

b. Applicability: Each inspector assigned to the CMT will receive briefings in the general topics and the subjects specific for his or her specialty. Data evaluation program managers (DEPM) and operations research analysts (ORA) will receive briefings in the general topics and in the subjects specific to operations, cabin safety, maintenance, and avionics.

c. Methodologies: The air carrier-specific outline of subjects may be presented by a combination of lecture, site visits, and directed self-study. Directed self-study will be completed during normal working hours and will not be used for more than 50% of recommended programmed

hour requirements. The CMO will provide self-study materials with a cover letter to the inspector's manager.

d. Air Carrier-Specific Briefing Presenters: Inspectors assigned to the CMT with expertise in the covered subject will conduct lecture portions of the air carrier-specific familiarization briefings. FAA Briefing and Presentation Techniques correspondence course (catalog number 14010) should be used by presenters without prior experience as instructors.

e. Assessment: Satisfactory completion of the briefings will be measured by an open-book oral or written quiz conducted by the CMO.

f. Record-Keeping: Each CMO will maintain a copy of its air carrier-specific familiarization briefing outline and any self-study materials. The CMO will document successful completion of the initial air carrier specific familiarization briefing for each CMT member using the Training Needs Assessment Web site. A copy of this record will be forwarded to the CMT member's manager for the inspector's local file.

g. Funding: Each CMO is responsible for the costs associated with completing the air carrier-specific familiarization briefings.

Authority
The CMO manager or designee is authorized to determine which subjects in the air carrier-specific outline of subjects are applicable to the air carrier's operations, and to determine the applicable amount of lecture and self-study hours.

Responsibility
The CMO manager ensures that air carrier-specific familiarization briefings are provided to all members of the CMT, using the guidance contained in this figure. Each CMT member's manager assigns directed self-study, provides official duty time for the individual to complete the self-study, and ensures that the assigned self-study has been completed.

Process Measurement
Completion of the initial air carrier-specific familiarization briefing is documented using the Training Needs Assessment Web site.

Controls
The CMT member's manager will receive and assign directed self-study materials after checking available resources. Principal inspectors (PI) will verify that inspectors assigned to the CMT have completed baseline training, including air carrier-specific familiarization briefings, before assigning them to inspections.

Interfaces
PIs will coordinate any necessary changes to the outline of subjects for the briefings annually. CMT members will provide the ATOS CMO with feedback on the air carrier-specific familiarization briefings for continuous improvement of ATOS processes.

OUTLINE OF SUBJECTS

General Topics - All Specialties
(Recommended Minimum Hours – 8)

1. OVERVIEW OF AIR CARRIER

a. Brief History
- (1) Mergers
- (2) Acquisitions
- (3) Financial status (i.e., bankruptcies)
- (4) Compliance attitude
- (5) Corporate headquarters location
- (6) Main base location
- (7) Corporate philosophy

b. Air Carrier Demographics
- (1) Key personnel (names/phone numbers)
- (2) Organization chart
- (3) Major programs
- (4) Location of hubs
- (5) Location of training bases
- (6) Location of maintenance facilities
- (7) Personnel strengths
- (8) Agent for service
- (9) Communications
- (10) Special operations
- (11) Fleet demographics
- (12) Aircraft numbering system

c. Areas of Operations
- (1) Type/fleet type of activity
- (2) Concentrations of activity

d. Code Sharing/Wet Lease/Interchange
- (1) Airline participants
- (2) Foreign flight attendant supernumeraries

e. Future Plans of the Air Carrier

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2. CERTIFICATE MANAGEMENT TEAM

a. Key Personnel
- (1) Listing (name and phone number of all)
- (2) PIs (including principal security inspector (PSI) and regional hazardous materials (hazmat) branch managers)

b. Policies and Procedures for CMT
- (1) Responsibility for coverage of incidents and occurrences

c. Individual Interests/Specialties
- (1) Type ratings, areas of interest, background and experience

d. Communications
- (1) Types of information to be requested directly from air carrier (points of contact)
- (2) Information available from the CMO
- (3) Points of contact and protocol

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3. BACKGROUND OF CSP

a. Special Emphasis Areas
- (1) Results of Air Carrier Assessment Tool (ACAT)/System Safety Assessment Tool (SSAT)
- (2) New and pending issues

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4. COMPANY MANUALS

a. Overview of Air Carrier Manual System
- (1) Manual numbering
- (2) Master listing of all parts of the air carrier's manual
- (3) Where to find the master listing
- (4) Where certain manuals are located

b. Types and Identification of Manuals
- (1) Hard copies
- (2) Computerized manuals; CD-ROM

c. Location of Manuals
- (1) Required on aircraft

(2) Required software, if applicable
(3) Required for crewmembers
(4) Microfiche reader
(5) Required at stations

d. Distribution and Revision
(1) Determining current revision status
(2) Use of computer, if applicable
(3) What method is used to issue revisions?
(4) Tracking responsibilities

e. Alerts and Bulletins
(1) Method to determine current status
(2) Transmission of bulletins and revisions

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5. SECURITY AND ACCESS

a. Access to Ramp and Facilities
(1) Site-specific requirements
(2) Air carrier's security coordinators

b. ID Badges

c. Cockpit Keys

d. Security Alerts for Travel Advisories

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6. HAZARDOUS MATERIALS

a. Acceptable Shipments

b. Documentation

c. Location Verification

d. Company Material (COMAT)

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7. EN ROUTE PROCEDURES

a. Jumpseat Authorization and Procedures
(1) Jumpseat operation
(2) Radio operation; headset location and use

b. Requirement for International Travel
(1) Country clearance forms
(2) Passport and visa

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8. FLIGHT DECK PROCEDURES

a. Checklist Location and Use
(1) Cockpit flows

b. Quick Reference Handbook (QRH) Location and Use

c. Safety Briefing

d. Crew Briefing; Communication

e. Required Paperwork/Documentation
(1) Location of logbooks (flight deck/cabin)
(2) Location of minimum equipment list (MEL)
(3) Airworthiness release
(4) Placards

f. Unique Fleet/Air Carrier Procedures

g. Airborne Communications Addressing and Reporting System (ACARS)
(1) Weight and balance
(2) Release amendments
(3) Communications

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9. CABIN PROCEDURES

a. Exit Seating

b. Emergency Equipment
(1) Location
(2) Preflight, if applicable, for flight attendants

c. Markings and Placards

d. Carry-On Baggage

e. Special Procedures

f. Medical Emergencies
(1) Medical oxygen
(2) Medlink
(3) AED (defibrillators)

g. Couriers

h. Cargo/Animal Handlers

i. Cockpit/Cabin Communications

j. Carriage of Weapons
(1) Forms and procedures

Specific Topics - All Specialties
(Recommended Minimum Hours – 8)

1. AIR CARRIER PROGRAMS
- **a. Deicing**
  - (1) General procedures and training
  - (2) Paperwork
- **b. Fueling**
  - (1) General procedures and training
  - (2) Paperwork
  - (3) Passenger handling during fueling
  - (4) Bonding and grounding
- **c. Pushback/Powerback Procedures**
- **d. International Procedures**
  - (1) Crew check-in time
  - (2) Crew complement
  - (3) Flight/duty and rest computation
  - (4) General declaration
  - (5) Passport and visa requirements
- **e. Special and Ferry Flight Procedures**
- **f. Cargo Operations**
- **g. Security**
  - (1) Hijack procedures
  - (2) Interference with crewmembers

2. RECORDS AND REPORTING
- **a. General**
  - (1) Format: paper, microfiche, electronic
  - (2) Electronic signatures
  - (3) Security issues
  - (4) Custody and retention

3. OPERATIONS SPECIFICATIONS
- **a. Exemptions and Deviations**
- **b. Special Areas of Operations**
- **c. Special Authorizations and Programs**
  - (1) Powerback procedures
  - (2) Single-engine taxi
  - (3) Extended overwater operations with two-engine airplanes (ETOPS)
  - (4) Areas of magnetic unreliability (AMU)
  - (5) Lower landing minimums (LIMP)
  - (6) Minimum Navigation Performance Standards (MNPS)
  - (7) Flight Operations Quality Assurance (FOQA)
  - (8) Aviation Safety Action Program (ASAP)
  - (9) Reduced vertical separation minimums (RVSM)
  - (10) Cat III procedures

4. STATION FACILITIES
- **a. Manuals**
- **b. Fueling Equipment and Facilities**
- **c. Maintenance Support**
- **d. Contract Services**
- **e. Passenger and Baggage Screening**
- **f. Cargo**
- **g. Marshalling and Ground Handling**

Operations and Cabin Safety Topics
(Recommended Minimum Hours – 8 to 16)

1. FLIGHT OPERATIONS PROGRAMS
- **a. Flight Planning and Documentation**
  - (1) Performance and operating limits
  - (2) Operational release
  - (3) Format of the release package
  - (4) Supplemental operations
  - (5) Passenger manifest
  - (6) Weather
  - (7) Weight and balance
  - (8) Documentation transmittal
- **b. Dispatch and Flight Following**
  - (1) Centralized procedures
  - (2) Shared procedures
- **c. MEL/ Configuration Deviation List (CDL) System/Deferral Process**

2. TRAINING AND QUALIFICATIONS
- **a. Overview**
  - (1) Operations specifications (OpSpecs)/specific training requirements
  - (2) Types of training conducted (wet lease, Advanced Qualification Program (AQP))
- **b. Training Facilities and Equipment**
- **c. Key Fleet Personnel**
- **d. Documentation of Personnel Requirements and Training**
- **e. Outsource Training**

3. REST AND DUTY TIME
- **a. Flight Crew**
  - (1) Records and reporting
  - (2) Scheduling
- **b. Cabin Crew**
  - (1) Records and reporting
  - (2) Scheduling
- **c. Dispatch**
  - (1) Records and reporting
  - (2) Scheduling

4. CABIN SAFETY
- **a. Flight Attendant Duties/Cabin**
  - (1) Supernumeraries
  - (2) Wet lease operations
  - (3) Reporting discrepancies
  - (4) Seatbelt discipline
  - (5) Child restraint
  - (6) Smoking requirements
  - (7) Number of required flight attendants
  - (8) Briefing requirements
  - (9) Reporting of mechanical discrepancies
  - (10) Sterile cockpit
- **b. Passenger Handling**
  - (1) Interference with crewmember programs
  - (2) Passengers who may appear intoxicated
- **c. Carry-On Baggage**
  - (1) Screening
  - (2) Carry-on baggage program
  - (3) Regional airline differences
- **d. Exit Seating**
  - (1) Announcements; briefing cards
  - (2) Interpreters
- **e. Gate Agent Procedures**
  - (1) Passenger service
  - (2) Supplemental operations
- **f. First Aid and Medical**
  - (1) Medlink procedures
  - (2) CPR training
  - (3) Equipment required
  - (3) Other equipment

Maintenance and Avionics Topics
(Recommended Minimum Hours – 8 to 16)

1. MAINTENANCE SYSTEMS
- **a. Air Carrier Procedures**
  - (1) General procedures manual
- **b. Suspected Unapproved Parts (SUP)/Parts and Materials**
  - (1) Site receiving inspection
  - (2) Scrap parts procedures
- **c. Ground Handling/Taxi/Run-Up Procedures**
- **d. Calibrated Tools and Test Requirements**
- **e. Maintenance Inspections**
- **f. Required Equipment**
  - (1) Aircraft
  - (2) Fly away kit
  - (3) Maintenance library

2. RECORDS AND REPORTING
- **a. Maintenance Logbooks/Recording**
- **b. Aircraft Records/Aircraft Listing**
- **c. Mechanical Interruption Summary**
- **d. Mechanical Reliability Reports**

3. OPERATIONS SPECIFICATIONS

4. STATION FACILITIES
- **a. Parts and Equipment**
- **b. Deicing Procedures**

5. MAINTENANCE ORGANIZATION
- **a. Maintenance Control**
- **b. Engineering Systems and Forms**
- **c. Internal Evaluation and Quality Assurance**
- **d. Airworthiness Directive (AD) Management**
- **e. Training Programs**
  - (1) Overview of qualifications and training
  - (2) OpSpecs/specific training
  - (3) Types conducted
  - (4) Training facilities/equipment
  - (5) Key personnel
- **f. Contract Maintenance and Repair Stations**
  - (1) Training verifications
- **g. Airworthiness Release**
  - (1) Format of the release package
  - (2) Supplemental operations
  - (3) Maintenance releases
- **h. Weight and Balance**
- **i. MEL/CDL**
  - (1) Preamble; general; revision status
  - (2) Deferral and tracking
  - (3) Coordination with maintenance control
  - (4) Action required for inoperative items
  - (5) Interim actions; DENT program
- **j. Special Programs**
  - (1) ETOPS
  - (2) AMU
  - (3) Lower landing minimums
  - (4) MNPS
  - (5) ASAP
  - (6) FOQA
  - (7) RVSM
  - (8) Reliability program
  - (9) Repeat maintenance items
  - (10) Required inspection items (RII)
  - (11) Continuous Analysis Surveillance (CAS)
  - (12) Coordination Agency for Supplier's Evaluation (CASE)
  - (13) Corrosion Prevention Control Program (CPCP)
  - (14) Aging aircraft program
  - (15) Supplemental Inspection Document (SID)/Supplemental Structural Inspection Document (SSID)

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Figure 2-1. Air Transportation Oversight System Surveillance Planning Guidelines

Before the Annual Surveillance Planning Meeting

- **Designate a Certificate Management Team (CMT) meeting coordinator**
  - The supervisor designates a member of the CMT as meeting coordinator. Although any CMT member can serve in this position, the CMT should select an individual at the certificate-holding district office (CHDO)/certificate management office (CMO) with organizational and leadership skills.
  - The pre-meeting planning should begin well in advance of the planned meeting date.

- **Notify the Air Transportation Oversight System (ATOS) CMO**
  - The CMTs will notify the ATOS CMO of the planned meeting date and the name of the current year's coordinator as soon as possible.
  - Planning assistance will be provided with a coordinator telecon, planning checklists, and personal visits with each CMT.
  - A representative from the ATOS CMO will attend each annual planning meeting.

- **Draft the Air Carrier Assessment Tool (ACAT) and notify CMT members that drafts are available**
  - The principal inspectors (PI) and the cabin safety inspector (CSI) will collect and organize the information and data necessary to complete the draft version of the ACAT.
  - PIs and the CSI will complete the ACAT to draft status based on all available data, expertise, and experiential knowledge.
  - Analysts will prepare data packages and provide them to each CMT, with guidance on their use.
  - The data review should include a query of "no" responses from the completed Safety Attribute Inspections (SAI) and Element Performance Inspections (EPI).
  - When the draft ACAT is complete, PIs should notify the CMT members that the drafts are available and request that CMT members provide comments via the automation system within a reasonable time period (two weeks at a minimum).

- **CMT members provide comments on ACAT**
  - Comments on the ACAT should reference the specific element and risk indicator. In addition, all comments should address who, what, where, when, how, and why.

- **Review comments and revise drafts**
  - The PIs will review CMT members' comments and, after considering all the comments, the PIs will revise the draft ACAT as necessary, based on those comments, before the annual planning meeting.
  - The PIs may begin working on the draft Comprehensive Surveillance Plan (CSP) at this time and complete as much preliminary work as possible before the meeting.

During the Annual Meeting

- **Review the draft ACAT and CSP with the CMT at the annual meeting**
  - The ACAT and CSP must not be finalized prior to the annual planning meeting.
  - The PI will bring the draft ACAT and CSP to the annual planning meeting, where the appropriate CMT subgroups will review and discuss them.
  - The process of finalizing the ACAT and CSP at the meeting involves several steps.

- **Divide each CMT into subgroups**
  - Ideally, CMT members from all specialties attend a combined annual meeting.
  - After the preliminary meeting activities, the CMT is divided into two subgroups to review the appropriate draft versions of the ACAT and CSP.
  - Subgroups should be briefed on the air carrier information used to prepare the ACAT.
  - The process that is used should allow all subgroup members to share information at the meeting.

- **Share information among subgroups**
  - Before saving the ACAT as final, the principal operations inspector (POI) and CSI should review the completed draft of the Airworthiness ACAT, and the principal maintenance inspector (PMI) and principal avionics inspector (PAI) should review the completed draft of the Operations ACAT.
  - This information sharing is critical to gaining a complete assessment of the carrier, and may result in some additional adjustments to the tools before they are finalized.

- **Complete the draft CSP**
  - Both Operations and Airworthiness specialties must complete the CSP. The PIs identify and record the surveillance requirements for each specialty.
  - Although this order mentions development of the CSP as one of the activities for the annual planning meeting, there is no specific written guidance on how CMT members should be involved in this process.
  - The PIs should review the draft CSP with the CMT members and obtain their input on the tentative plans for the frequency of inspections and identification of individuals for SAI teams and EPI assignments.
  - The PIs may need additional time after the meeting to complete their instructions for specific inspections and finalize the plan.

- **Obtain information about CMT members' experience and training**
  - The annual meeting provides the opportunity for PIs to obtain information about CMT members' prior experience and training.
  - The PIs may ask for volunteers who are interested in working on specific SAI teams or EPIs.

After the Surveillance Planning Meeting

- **The PIs will develop the final CSP**
  - The PIs will identify inspectors to accomplish the CSP and provide instructions that target the CSP activities to the specific needs of their air carrier.
  - The PI's most important work on the CSP typically begins after the meeting, to coordinate the efforts of the entire CMT in accomplishing the surveillance needs for its air carrier.

- **Identify inspector resources**
  - To finalize the CSP, PIs must identify the appropriate teams or individuals to perform each inspection.
  - During inspector identification, PIs should consider training, experience, qualifications, geographic location, availability, and workload.

- **Determine if resources are adequate**
  - If the PIs determine there is insufficient staffing to accomplish all inspections in the CSP, they will send a memo to their regional office through the CHDO/CMO manager for resolution.
  - Insufficient staffing involves the number of inspectors, as well as where those inspectors are located and what qualifications are needed.
  - The PIs play an important part in identifying the need for additional CHDO/CMO staffing, additional or relocated geographic staffing, and essential training requirements for CMT members.
  - This information should be provided throughout the year to the PI's manager.

- **The CSP is not driven by availability of resources**
  - The CSP is not planned or retargeted based on the availability of resources.
  - If the required resources are requested but not provided, the inspections remain in the CSP as planned, but unassigned, by selecting the Resources Not Available (RNA) option.
  - An inspection designated as RNA can be changed to an inspector assignment when additional resources become available.

- **Instructions help to ensure timely, high-quality inspection data**
  - The CSP provides PIs with a plan that is tailored to the current surveillance requirements for the specific air carrier. PIs must provide instructions to ensure that activities are performed at the appropriate locations at the appropriate times to answer the questions on the Data Collection Tool (DCT) in a reasonably short timeframe.
  - PIs use instructions to prioritize inspections and set timelines for starting and completing the activities by certain dates.
  - The CSP should include guidance on the type, location, and timing of inspection activities. The PI may request that the activities take place at specific locations or involve specific makes/models.

- **The purpose of surveillance is to obtain accurate, continuous, real-time data to support decisionmaking**
  - The purpose of surveillance is to provide an accurate, real-time, and comprehensive evaluation of the safety status of the air carrier's systems and compliance with Title 14 of the Code of Federal Regulations (14 CFR).
  - SAIs, EPIs, and Dynamic Observation Reports (DOR) and Constructed Dynamic Observation Reports (ConDOR) are not comparable to the "R" and "P" activities assigned under the National Program Guidelines (NPG) work plans.
  - Inspectors are not evaluated by how many activities they enter into the ATOS Data Repository by a certain date.
  - Inspectors should not leave EPIs open to have a place to report everything they observe during the normal course of their duties.
  - Observation of air carrier operations not included in a surveillance task may be captured as an investigative activity using a DOR.

- **Pre-planning and preparation are essential in ATOS inspections**
  - CMTs should study DCTs to determine the level of observation needed for each particular element.
  - It is not appropriate for CMT members to perform random work activities and then try to figure out which EPI or SAI to use for reporting those activities.
  - If a CMT determines that more SAIs or EPIs are necessary as the year progresses or if additional risks develop, there are two options. PIs can:
    - Update assessment values in the ACAT at any time. Changes in the ACAT are applied to the existing CSP without creating a new version. Changes to the ACAT must be approved by both the PAI and the PMI for airworthiness, and the POI and the CSI for operations.
    - Add or change records in the CSP, or delete records when no work has started.

Safety Attribute Inspections (SAIs)

- **Planning the number of SAIs**
  - SAIs ensure that safety is incorporated in a particular area of an air carrier's operation by inclusion of the six safety attributes and that it also complies with the applicable regulations.
  - The SAI captures baseline information (or certification status) on the systems that are in place and the EPI validates the performance of the system.
  - CMTs should plan SAIs for any subsystems/elements that have significant operator changes or safety concerns.
  - SAIs should be accomplished in the order of priority that is generated by the ACAT.
  - ATOS CMTs should complete an SAI for each element within three to five years of starting surveillance using the ATOS, and then plan to accomplish an SAI for each element at least every five years.
  - If there are no significant changes in the air carrier's systems then there should not be a reason to plan another SAI outside of this rotational schedule, unless driven by risk assessment.

- **SAIs can be completed by a team or a single inspector**
  - SAIs are executed at the element level; planned for at the subsystem level. A team of inspectors or a single inspector who must be listed as the team coordinator (TC) completes SAIs. Each team is responsible for a subsystem or portion of a subsystem, under the leadership of a TC.
  - This structure allows the CMT to assess the entire subsystem and obtain a big picture look at how the air carrier operates. If CMTs decide to assign elements from different subsystems to an SAI team, this concept will be lost.
  - PIs should consider the nature and complexity of each element to be inspected, and whether the team method or the single-inspector method is appropriate. SAI teams should always contain a sufficient number of inspectors with a sufficient knowledge base to accurately inspect the element. The inspector(s) designated to complete the SAI should be appropriately trained and knowledgeable on subjects related to the SAIs. Supervisory concurrence must be obtained to accomplish an SAI using a single inspector. Complex or critical SAIs should not be completed using the single-inspector method or the same inspector repeatedly whenever possible.

- **The SAI TC is an important position**
  - SAI TCs play an important role in organizing and coordinating SAI team activities.
  - The TC ensures that activities, such as personnel interviews, are not repetitive or redundant, and that all activities are completed to accurately answer the questions on the SAI.
  - The TC is a leadership role that should be assigned to an experienced inspector, with a solid knowledge of the air carrier, who is based near the location where most SAI activities will take place.
  - Teams can be comprised of inspectors with varying backgrounds and experience, and from different geographic locations.

Element Performance Inspections (EPI)

- **Planning the number of EPIs**
  - EPIs are designed to determine if an air carrier follows its written procedures and controls for each system element and if the established performance measures for each system element are met. EPIs determine if the procedures accomplish regulatory compliance and safety.

- **Determining the frequency of EPIs in the CSP ACAT**
  - EPI frequency baseline is the inspection frequency for each element that is based on the element's criticality baseline value.

Criticality Baseline	Frequency Baseline	EPIs Required
High	Semi-annual	At least (1) EPI must be completed within 6 months of the last EPI completed for an element.
Medium	Annual	At least (1) EPI must be completed within one year of the last EPI

		completed for an element.
Low	Tri-annual	At least (1) EPI must be completed within three years of the last EPI completed for an element

— EPI minimum frequency is determined by applying ACAT assessment values to the EPI frequency baseline for an element to determine if the inspection frequency for that element should be raised based on indications of risk. Inspection frequency does not change if ACAT assessment values are between 0% and 10%. If ACAT assessment values are 11% or above inspection frequency is changed as follows:

Frequency Baseline	**ACAT Assessment**	**Minimum Frequency**
Semi-annual	11% or above	No change in Frequency Baseline but it is recommended that PIs take additional action (i.e., SAIs ConDORs, RMP, etc.)
Annual	11% or above	Semi-annual
Tri-annual	11% or above	Annual

- **PIs determine surveillance requirements**
  — A record for each EPI required by the minimum frequency will be entered into a separate Performance Assessment (PA). A PA is one or more EPIs scheduled to be completed within the same time period to determine if the air carrier is following its written policies and procedures, and if the process is achieving the desired result.
  — Depending on the complexity of an air carrier element, PIs may determine whether single or multiple EPIs are sufficient for each PA. The PIs may also increase the number of PAs if necessary to evaluate an element.

- **PI instructions**
  — Since the purpose of an EPI is validation of an air carrier system to ensure that it is working, the PI should provide guidance for completing these inspections based on environmental factors. Examples are shown in the table below.

Activities for an EPI on…	**Should be conducted…**
Carry-on baggage	At stations with high passenger loads and during peak travel times
Maintenance facilities	When there is maintenance being performed
Deicing	When icing is likely to occur

— To ensure that inspectors do not leave an EPI open for a longer time than necessary to collect quality data, instructions should include a targeted completion date.
— PIs may use queries to track the completion of EPI activities.
— Managers and supervisors should monitor the inspector's progress towards completing the EPI by the requested date.

- **Retargeting surveillance is an integral part of the dynamic CSP.**
  - The purpose of retargeting surveillance is to provide the CMT with the means to dynamically redirect surveillance at any time in response to changing conditions at an air carrier. These may include changes in the airline's status or situation (changes in management or labor relations); accidents and incidents; or observations made by inspectors during surveillance activities.
  - Anytime surveillance data identifies a problem or other external data triggers an issue, the PI assesses the information and determines any surveillance retargeting requirements. The important point here is that the CSP is a dynamic plan. By using the retargeting surveillance functionality and the other automation features, the plan can be continuously updated based on the quality data collected by the CMT members.
  - Surveillance retargeting should not be conducted in response to CMT internal considerations such as staffing or budget constraints. A CSP surveillance can be retargeted as often as needed, however the surveillance retargeting process is not intended to be used on a calendar basis as a means of closing out a planning cycle.
  - In addition, it is not advised to continuously retarget surveillance to the same elements within a CSP once performance deficiencies are identified. Conducting a thorough system assessment, such as a SAI, for those elements is warranted.
  - If surveillance retargeting is deemed appropriate to focus additional resources in an area of concern, the PI must determine which elements of the ACAT are related to the area of concern. This can be done for the entire air carrier or for selected systems, subsystems, or an individual element. Retargeting does not automatically delete or remove any information contained in the current CSP.
  - Retargeting surveillance is not negative. It does not mean that something was faulty in the original CSP. It is perfectly normal for a CMT to retarget surveillance several times a year based on the analysis of data or on changing circumstances.

- **Inspector assignments can be changed anytime work has not started**
  - Assignment changes may include switching from an RNA designation to an inspector, or vice versa, and reassigning an inspection that has not yet been started.

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Figure 2-2. Air Carrier Assessment Tool

The Air Carrier Assessment Tool (ACAT) is an automated tool that is designed to analyze and assess the elements of an air carrier's systems using a series of risk indicators. A risk indicator is a safety and/or performance-related data or information group that reflects an area of potential risk. There are 31 risk indicators in the Airworthiness ACAT and 29 risk indicators in the Operations ACAT. A representative from each technical specialty (principal operations inspector (POI), cabin safety inspector (CSI), principal maintenance inspector (PMI), principal avionics inspector (PAI)) approves and submits the ACAT to ensure that the entire system was evaluated for indications of risk.

The risk indicators are divided into two major categories—System Stability and Operational Risks—designed to reflect the fact that air carrier systems are impacted by both internal and external events. Each major category is further subdivided into two subject areas; these subject areas are designed to focus the indicators on those operational, performance, and environmental risks most likely to impact an air carrier's systems. The System Stability category is divided into Operational Stability and Air Carrier Dynamics. The Operational Risks category is divided into Performance History and Environmental Criticality. The complete set of indicators is designed to provide the PI with the means to assess the elements and determine the system-based surveillance requirements for an air carrier's annual CSP. The definitions and criteria for each of the 31 indicators are provided on the following pages.

SYSTEM STABILITY	OPERATIONAL RISKS
OPERATIONAL STABILITY	**PERFORMANCE HISTORY**
Safety Performance Analysis System (SPAS) Management/Economic Indicator(s) Indicators	Enforcement Actions
Change in Air Carrier Management	Accidents/Incidents/Occurrences
Turnover in Personnel	DoD/RASIP
Reduction in Workforce/Layoffs/Buy-Outs	Self-Disclosures
Rapid Expansion/Growth	Safety Hotline/Complaints
Merger or Takeover	New Entrant Carrier
Labor-Management Relations	SPAS Trend Indicators
AIR CARRIER DYNAMICS	**ENVIRONMENTAL CRITICALITY**
Inspection Department/System (airworthiness Only)	Age of Fleet
New/Major Changes to Program	Varied Fleet Mix and Mixed Configuration
CAS System (Airworthiness Only)	Complexity of Aircraft
Safety System	Outsource (M, T, GH)
Internal Evaluation Program	Seasonal Operations
Best Practices	Relocation/Closing of Facilities
Resource Management Training	Lease Arrangements
Risk Management	
Cooperative Relationship with the FAA	
Human Factors	

System Stability/Operational Stability Risk Indicators

Safety Performance Analysis System (SPAS) Management/Economic Indicator(s)

The Safety Performance Analysis System (SPAS) management indicator(s) and SPAS economic indicator(s) provide subject-specific indications of the current system and operational stability of the air carrier. The SPAS management indicator(s) incorporate the SPAS performance measures related to changes in the following key management personnel:

- *Chief executive officer;*
- *Chief inspector;*
- *Chief pilot*
- *Director of maintenance*
- *Director of operations*
- *General manager*
- *Principal avionics inspector*
- *Principal maintenance inspector; and*
- *Principal operations inspector.*

This indicator is designed to measure the stability of air carrier management due to changes in designated personnel for both small and large air carriers. Vital Information System (VIS) data is used to track changes in these nine personnel categories for each air carrier.

The SPAS economic indicator(s) provides a measure of the current economic state of the air carrier based on the credit information compiled through TRW's Business Credit Services. This indicator is designed to forecast the likelihood that an operator's business will enter a period of increased economic and financial risk within the next six months. SPAS indicator data is available in different formats. It can be used to drill down to a detailed level, is available for five previous years, and can be used to compare the air carrier to its own records or to the average performance of the entire industry segment in which it is categorized. Analysis of this data can provide insight into the air carrier's current safety and economic profile, as well as to detect developing trends; analysis over a period of time may also provide an indicator of the root causes of these trends. The results of this type of analysis can be used to target surveillance and to reduce the potential for failure in air carrier systems, subsystems, and/or elements. In rating the air carrier elements based on SPAS indicator(s) data, consider the following:

- A large percentage of change, whether favorable or unfavorable, over a period may indicate management, economic, and/or operational changes that could affect the stability of the air

carrier's systems and safety profile. Where necessary, drill down to specific events and review the underlying data.

- Determine the potential impact of SPAS indicators on the air carrier's system and operational stability with consideration to the size of the air carrier. The impact of SPAS indicators on small air carriers may be greater than on large air carriers, all other things being equal. Key management personnel at a small air carrier may play multiple roles. The loss of this type of management capability could be significant. Economic and/or financial changes such as changes in its external credit rating due to flux in the marketplace, and loss of passenger volume and related revenues could be significant to a small air carrier. In both instances a large air carrier may have additional resources that can be relied upon.
- Determine the potential impact of SPAS indicators on new air carriers versus experienced air carriers. The impact of SPAS indicators on new air carriers may be greater than on experienced air carriers, all other things being equal. Key management personnel are considered critical to ensuring the success of the new entrant's initial operating plan. The Office of the Secretary of Transportation issues its economic authority with consideration given to the strength of the new entrant air carrier's management team. High management turnover could be significant to a new entrant, whereas an established air carrier may have additional levels of key management and be better prepared to sustain the loss. Regardless of the number of years an air carrier has been in operation, the changes reflected in the SPAS indicators should be considered in light of their potential impact on system and operational stability.
- Consider the impact management, personnel, economic, or operating changes may have on the related SPAS indicators. Consider the impact that changes in the industry could have on the air carrier systems and operations, particularly in the period immediately following the change.

Change in Air Carrier Management

Changes in areas other than key management personnel can also have a significant impact—positive or negative—on an air carrier's system and operational stability. This indicator is intended to focus on changes in air carrier management not captured through the SPAS management/economic indicator, such as changes in air carrier middle management personnel that is responsible for managing critical departments of the organization. Consultation with the air carrier or use of industry data may be helpful in identifying such changes and assessing the impact of their departure. In rating the air carrier surveillance elements based on changes in air carrier management data, consider the following:

- A change in air carrier middle management may have a greater impact on small air carriers than large air carriers, all other things being equal. Middle management at a small air carrier may be primarily responsible for the quality of the air carrier's systems, and any major changes could be significant. A large air carrier may have additional resources that can be relied upon when air carrier middle management personnel change. Regardless of size, the significance of the change in air carrier management should be assessed to determine the potential impact on the air carrier's system and operational stability.
- The air carrier management may include personnel in the air carrier's safety and/or quality assurance, engineering, operations, and maintenance departments. Changes in middle management in any of the air carrier's major lines of business should be considered; changes in administrative management should also be considered though they may not have the same level of impact.
- In general, internal selections of new management personnel are less disruptive than external hires. However, if the air carrier has a history of safety problems, external knowledge and experience may provide the organization with an opportunity to build a stronger safety system. Similarly, civil experience may be preferable to a military aviation background in new management personnel since knowledge of Title 14 of the Code of Federal Regulations (14 CFR) and experience interfacing with the FAA are beneficial.
- If the reason behind the change is performance-based, the change may be an improvement. On the other hand, downsizing, streamlining, and reorganizing may reduce the amount of safety oversight within the air carrier. New programs may alter existing lines of authority and supervision. Ownership changes may result in the replacement of key departmental managers.
- Cost-cutting and greater bottom-line pressure can undermine or dilute an air carrier's quality orientation and may lead to reduced emphasis on safety. Each change should be considered in light of the systems that it could affect.

Turnover in Personnel

A loss of personnel can dramatically increase the potential for failure in one of the air carrier's systems, subsystems, or elements. The loss may be contained in and affect only the maintenance or operations organizations, or there may be a significant loss of key personnel throughout the entire organization. Maintenance personnel include staff members directly involved in ensuring the quality of the maintenance organization. Operations personnel include staff members directly involved in ensuring the quality of air carrier operations, including flight crewmembers, flight attendants, dispatch, and training staff. Consultation with the air carrier may be helpful in identifying these people and assessing the effect of their departure. Consider these issues when assessing this indicator:

- Turnover in air carrier personnel may have a greater impact on small air carriers than large air carriers, all other things being equal. A loss of personnel responsible for ensuring the day-to-day operations or maintenance quality of the air carrier's systems at a small air carrier could be significant. A large air carrier may have additional resources that can be relied upon when air carrier personnel change. Regardless of size, the significance of the change in air carrier personnel should be assessed to determine the potential impact on the air carrier's system and operational stability.
- A high turnover in personnel, across the air carrier, or within the maintenance or operations organizations, should always raise a concern. Consider the impact—positive or negative—that loss of personnel due to downsizing, streamlining, attrition, the end of a program, and/or reorganizing, has on quality and safety.
- Depending on circumstances, internal selections of new personnel are less problematic than external hires. If, however, the air carrier has a history of safety problems, external knowledge and experience may provide the organization with an opportunity to build a stronger safety system. Similarly, civil experience may be preferable to a military aviation background in new management personnel since knowledge of 14 CFR and experience interfacing with the FAA are beneficial.
- Consider whether or not new or remaining staff is being retrained or cross-trained to perform the new or expanded maintenance or operations functions. The impact that the turnover in personnel has on critical systems should also be considered.
- If the reason behind the turnover is an expected, controlled change, it may not be a concern. On the other hand, if the turnover is sudden and due to employee dissatisfaction, it could indicate future problems.
- Consider the impact of personnel turnover on the air carrier's control systems. Well-established and maintained control systems with fully documented procedures may allow the air carrier to absorb turnover in personnel without affecting quality or safety.

Reduction in Workforce/Layoffs/Buy-Outs

Workforce reductions, layoffs, or buy-outs may or may not have an impact on safety and the potential for noncompliance; it depends on how and why they occur, and who is involved. Consider the following in assessing this indicator:

- Workforce reductions, particularly when large numbers of air carrier personnel are affected, may be managed and/or absorbed more easily by large air carriers than by small air carriers. Regardless of size, the significance of the workforce reduction, layoff, or buy-outs should be assessed to determine the impact that these events could have on the air carrier's system and operational stability.
- The pace or rate of any reduction is important. If it is gradual, steady, and implemented over a reasonable period of time, there may be no cause for concern. On the other hand, if it is abrupt, haphazard, uncoordinated, or occurs over a short timeframe, it may be an indication of instability.
- In general, layoffs of administrative and support staff may cause less concern than the loss of key management or technical personnel. Loss of the most experienced personnel, as often occurs in air carrier buy-outs, or of quality, safety, or training personnel, should always raise a concern.
- Consider the reason(s) for the reduction. If the reduction is due to the end of a major program or part of a normal industry cycle, it may not be problematic. Downsizing, streamlining, and reorganizing, by contrast, may be of concern depending on how they are handled. Any de-emphasis on safety and quality should be viewed with caution.
- Consider the strength of the affected program or department's control system. If they include well-established processes and controls, the air carrier may be able to absorb a workforce reduction or layoff without affecting quality or safety.
- Further consider the issue of training as it relates to workforce reductions or layoffs. Whether or not new or remaining staff is being retrained or cross-trained to perform the new functions is a factor. The basic qualifications of staff performing critical functions or roles, as well as the adequacy and effectiveness of any training provided to personnel assuming new or expanded duties, should be factored into your determination. The impact that the losses and time factor required for training or retraining have on the air carrier's systems should also be considered.

Rapid Expansion/Growth

Air carrier expansion or growth can also raise potential safety and quality concerns, and influence the likelihood of noncompliance with existing processes and controls. Rapid expansion or growth could affect the air carrier's resources and the operations, maintenance, and training programs required to run the business. Similarly, as an air carrier grows, it may not add the necessary personnel, internal control mechanisms, or financial resources necessary to sustain its infrastructure or an expanded scope of operations. Consider the following when evaluating this indicator:

- The speed, depth, and breadth of growth are critical. If growth is controlled and steady, as opposed to rapid "overnight" expansion, there is generally less potential for problems. If the growth involves opening a new facility or facilities, or results in new or additional geographic dispersion of the workforce, safety and quality issues should be considered.
- The nature of growth also needs to be considered. If the company is expanding into new business areas, expanding its technological base, or bringing on new types of aircraft or programs, this may be cause for concern. Likewise, if it is acquiring new and/or additional approvals, heightened concern may be warranted.
- Do not overlook proxy growth, or internal growth—things that may not be immediately obvious. Proxy growth occurs when new or different personnel are used in the place of existing personnel or when operational authority is delegated due to absence. Greater use of outsourcing, subcontracting, or suppliers can expand a company's business without changing its staff or facility size. Internal shifts in personnel or business emphasis can also significantly affect the safety picture. Generating more output with the same or fewer resources, through process improvement or productivity enhancements, can also create de facto growth.
- The extent to which staff size and capability have kept pace with any growth is also important. Providing appropriate training to staff in new program areas is a sign of well-managed growth. The absence of such actions should probably raise a concern. The impact of rapid expansion or growth on critical air carrier systems should also be considered.
- Consider the impact of growth on the air carrier's control systems. If they include well-established processes and controls, the air carrier may be able to absorb the growth in business areas, technology, aircraft types, or programs without affecting safety. If growth changes or reduces the efficiency or effectiveness of the control systems, further assessment is warranted.

Merger or Takeover

Mergers and takeovers have become increasingly common in the aviation industry. Who is buying and what they do to, or with, the acquired air carriers and their systems, subsystems, and elements should drive the assessment rating. With a merger or takeover, the air carrier's management structure, personnel, contractors, and facilities may change. All of these factors could have an impact on the operational stability of the air carrier. Consider these issues if a merger or a takeover has occurred:

- Consider whether or not the buyer has an aviation background. If not, initially this may cause problems. If the buyer does, prior experience interfacing with the FAA and knowledge of 14 CFR is an additional plus. The buyer will know the regulations and also have a safety/compliance track record that can be checked.
- Also consider the impact of the merger or takeover on the organization's system controls. If the air carriers are substantially different, integrating their system controls may be challenging and problematic. If the merger or takeover changes or reduces the efficiency or effectiveness of the system controls, further surveillance is warranted.
- Retaining key personnel, or replacing them with qualified staff.
- Consider the background of new staff if key personnel are laid off or replaced. A solid aviation background may compensate for the loss of personnel with air carrier-specific experience. New staff with previous civil aviation experience and 14 CFR and FAA familiarity may ease the transition and have less of an impact on quality and safety.
- Impact on safety or quality.
- Some merger or takeover transactions have no real impact on safety or quality. The outcome may simply be a name change, or it may occur at a very high level. In these cases, the impact on system or operational stability may be minimal.

Labor-Management Relations

Smooth and consistent labor-management relations are critical to the system and operational stability of the air carrier. Disagreements between labor and management can disrupt air carrier operations and have a tremendous impact on the quality and safety of an air carrier. A threatened or actual shutdown in operations can have a disastrous economic impact on an air carrier. This, in turn, can affect the stability of an air carrier's systems. On the other hand, a good working relationship between air carrier labor and management can positively affect air carrier operations and safety. Consider the following when rating the relationship between air carrier labor and management:

- Consider the status of the bargaining agreement between air carrier labor and management. If an agreement is in place, operational, and not in the process of being renegotiated, the relationship may be secure and stable. If the air carrier is amidst labor negotiations or scheduled to renegotiate in the near future, the relationship, though stable, may be changing. Look for signs that indicate a lack of trust between parties. This could be an indicator of future problems. If negotiations are underway and going smoothly, and trust exists between labor and management, there may be no cause for alarm.
- An air carrier that operates as an owner/operator business may have no bargaining agreement. Look for dissatisfaction among groups within the owner/operator base to indicate instability. Long hours and low pay, even as an owner/operator, can present problems and have an impact on an air carrier's system and operational stability.
- Consider the impact that adverse labor-management negotiations can have on the air carrier's control systems. If the air carrier does not recognize a threat to its control systems, and the labor negotiations are lengthy, problems could result. If the air carrier recognizes the threat to its control function and takes steps to ensure operational effectiveness, there may be little or less of a problem.
- Ascertain whether the air carrier's current labor-management relationship has an operational impact on safety or quality. If there is no real impact at the operational level, air carrier systems may not be affected. If there is an impact at the operational level, air carrier systems could be affected and problems could follow.

System Stability/Air Carrier Dynamics Indicators

Inspection Department/System (Airworthiness Only)

The effectiveness and stability of an air carrier's inspection department and related processes and system controls is critical to its safety profile. Quality control, or the air carrier's capability to effectively manage and audit both the day-to-day and strategic aspects of its inspection department and related systems, is a critical indication of its capability to identify potential safety issues and trends before accidents, incidents, and noncompliance occur. An effective inspection department includes defined lines of authority, a structured process for delegation of authority, clear distinction and separation between the production (maintenance) and inspection functions, and an effective quality control or assurance function that is designed to identify and resolve issues before they become safety problems. Consider the following in rating this indicator:

- Consider the reason behind any changes in the inspection department. A performance-based change may be an improvement. On the other hand, changes that do not address performance could affect the amount of safety oversight within the department. Changes in authority, supervision, and/or inspection department management may be cause for concern.
- Determine if there were any changes in required inspection item (RII) personnel or the RII program. If there were changes, consider the impact of the changes on the air carrier's inspection department and quality control system.
- Determine the strength of the department's control system(s). The quality of the control system and its capability to consistently anticipate and indicate deficiencies is critical to air carrier self-identification of potential problems. A clear separation between the production and inspection functions is also a positive indication of the air carrier's quality control system. If the lines of distinction are not clear between these two functions, there may be cause for concern.
- Consider whether the department is structured and has systems designed to integrate enhancements and improvements. Proactive changes made to correct deficiencies before they become problems are an indication of the quality of the inspection department. Documentation and dissemination of potential safety issues and problems both within the inspection department and throughout the organization is another indication of the effectiveness of the air carrier's control system(s). Be concerned if the air carrier's inspection department and related systems are not designed to anticipate, identify, resolve, and document potential safety issues and trends.
- Consider the rate of change within the inspection department. If the change is gradual, steady, and implemented over time, then there may be no cause for concern. If the change is abrupt, haphazard, and/or occurs over a short timeframe, it may be an indication of instability.
- Consider the degree to which there is delegation of duties and authority within the inspection department. If the air carrier does not normally have a high level of delegated duties, growth in this area could be an indication of management instability or fluctuation in, or lack of, staff. Excessive delegation of operating authority within the inspection department could also be problematic, particularly if done routinely and without clear communication and full documentation.

New/Major Changes to Program

A major change in a program, or the introduction of a new program to the air carrier, can create quality or safety issues and may increase the potential for noncompliance with existing processes and controls. If the new program or program change affects the air carrier's operating plan, it could have a significant impact on the air carrier's operations, maintenance, and training systems. Consider the following in rating this indicator:

- All new or major changes to programs should be well described and fully documented. Program documentation that does not exist or does not adequately describe the new or changed environment should raise a flag. New programs or program changes that are well documented should be no cause for concern.
- Consider the impact of new or major program changes on personnel. Does the air carrier's staff size and capabilities meet the requirements of these programs? Consider whether air carrier personnel are trained in and have a clear understanding of the new program or program changes.
- Consider the reason behind any program improvements or enhancements. Program improvements or enhancements are often positive, provided they are not motivated primarily by cost cutting and 14 CFR compliance is maintained. Changes based on FAA recommendations and findings will be encouraged and can generally be viewed as a positive indication of the air carrier's commitment to managed change and system stability.
- Consider the strength of the department's system control(s). Well-established and maintained system controls, with fully documented procedures, may allow the air carrier to absorb new programs or program changes without affecting quality or safety. If the programs reduce the efficiency or effectiveness of the system controls, further surveillance may be warranted.

Continuous Analysis and Surveillance System (Airworthiness Only)

The quality and effectiveness of an air carrier's continuous analysis and surveillance (CAS) system can have a significant impact—positive or negative—on its safety profile. A CAS system provides the air carrier with an internal diagnostic and evaluation tool (audit and surveillance) for continuously monitoring and correcting deficiencies in its maintenance program through a system of ongoing data collection, data analysis, and trend reporting. As air carriers are primarily responsible for the safety and stability of this program, an effective CAS system is a powerful management tool. When implemented and maintained within an environment that includes clear definition of responsibilities, process independence, management commitment, continuity, scheduled evaluation, corrective action and followup, and clear, concise, and available documentation, a CAS system can provide the air carrier with one critical means of ensuring management control over the maintenance organization. Consider the following when rating this indicator:

- Determine if the CAS system is independent. To ensure that the methods of the maintenance organization conform to its requirements, the CAS system should function as an independent management tool.
- Determine if the CAS system includes an aircraft/component performance monitoring function. Consider whether that function involves collecting, compiling, and analyzing data; comparing collected data to established standards; identifying deficiencies; and taking corrective action. It could be problematic if the CAS system does not provide the air carrier with the data necessary to effectively monitor routine day-to-day activity, respond to emergency situations, and monitor long-term trends. By design, a CAS system should provide the air carrier with the data necessary to determine the cause of a problem so that corrective action can be taken to prevent similar situations from occurring.
- Consider the CAS system personnel requirements. The CAS system-supporting environment should include personnel who have the responsibility for evaluating the results of the CAS, defining and developing corrective action plans, and reporting CAS and corrective action results. The air carrier is ultimately responsible for the deficiencies identified through their CAS system and must have properly trained personnel to accept this responsibility and be accountable for the aircraft/component performance monitoring, internal audit, and surveillance functions. Consider the air carrier's training programs in this area and the performance history of the responsible personnel.
- The CAS system should be supported by written procedures for data collection and analysis. These would include development of trend information, performance standards, reporting standards, and corrective action and followup standards. The effectiveness of these procedures in supporting CAS functionality should be ascertained. If these written procedures are not clearly defined and readily accessible to the personnel responsible for internal audit and surveillance, a flag should be raised.
- Determine if an internal audit and surveillance function exists to support the CAS system. The function should have the authority to followup on corrective action measures. If the authority to followup on corrective action is readily apparent and well-defined, the potential for problems in this area is generally lessened. Regardless of where they are located within the

organization or how the air carrier has elected to implement the requirement, the personnel responsible for internal audit and review of the CAS system results should be clearly identified and defined so that they are independent of the maintenance organization. Be concerned if the internal audit and surveillance function is not separate from the maintenance organization and does not cover all aspects of the air carrier's approved program.

- Determine if there is a well-designed and effective means of communicating the results of the CAS system and any related corrective actions. The CAS system should have clear and functioning channels for the flow of analysis and surveillance information. Find out if the information channels include contractors/vendors as well as the air carrier personnel. The air carrier should have a defined means for disseminating aircraft/component performance and corrective action information properly. Determine if this mechanism includes a feedback loop designed to ensure that any changes implemented as a result of the corrective action are functioning as intended and improving the process. The information to be disseminated and any actions that occur as a result of sharing this information should be documented.
- Consider changes to the CAS system in terms of the impact they may have on the performance and effectiveness of the inspection department and the air carrier's program covering maintenance, preventative maintenance, and alterations. In addition, consider how the change might affect the air carrier's capability to identify, isolate, and correct deficiencies in the program regardless of whether the programs are carried out by the certificate holder or by another entity. It could be problematic if the air carrier's capability to correct deficiencies is affected by the change to the CAS.

Safety System

An internal safety program is one of the most powerful tools that air carrier management can employ to measure and ensure flight safety. An effective safety program can also be a measure of an air carrier's system and operational stability. Consider the following in rating this indicator:

- Determine whether the air carrier has a formal safety program. Consider whether the air carrier has a written statement of corporate safety policies and objectives. Consider whether the air carrier has a flight safety department or a designated flight safety officer. If the air carrier has a flight safety department or officer, determine how well the policies and procedures are implemented and the effectiveness of the process. While having a designated flight safety department or officer is a positive indication, the overall effectiveness of the air carrier's safety program is most critical.
- Consider the importance of the safety program within the air carrier. Visible senior management support for these policies and objectives is a positive indication of the air carrier's position on safety. If the air carrier's management philosophy places a strong emphasis on safety, it will generally be visible throughout the rest of the organization. If the safety department or safety officer reports directly to senior air carrier management or the board of directors, this may also be an indication of the importance the air carrier places on safety.
- Consider if there is a well-designed and effective means of communicating safety information to employees. The air carrier should have an effective means for disseminating safety policies and objectives throughout the organization. Determine whether the air carrier:
  - Conducts periodic company-wide safety meetings;
  - Supports periodic publication of a safety report or newsletter; and
  - Distributes safety reports or newsletters from other external sources.
- Consider whether the air carrier participates actively in industry safety activities. Such activities include those sponsored by the Flight Safety Foundation (FSF), International Air Transport Association (IATA), and others. Also consider whether the air carrier has or will share their safety-related data with other air carriers.

Internal Evaluation Program

The internal evaluation program should provide a measurement of the air carrier's internal processes and procedures to assess whether they are adequate and functioning properly. Consider the following in rating this indicator:

- Determine whether the air carrier's internal evaluation program is independent of the development of procedures and the management of work. Assess whether the air carrier's program defines the responsibilities for performing evaluations, developing corrective actions and reporting results. These duties should be clearly defined so they are independent of other duties and responsibilities.
- Consider whether the air carrier's program a structured, organized activity that includes planned and followup evaluations. The schedule and plan should be directed and recognized by top management. The identified deficiencies must have corrective actions implemented in a timely manner and management should hold the responsible person accountable for ensuring corrective action has been taken. The evaluation program must have a process to identify what corrective action has been taken and the capability to schedule followup evaluations.
- Determine whether the air carrier maintain records documenting the performance and results of the internal evaluation program. The air carrier should be identifying the root causes of the conditions disclosed in findings and implementing final resolution.

Best Practices

An air carrier's safety philosophy or priorities are often reflected in the way that it views and applies 14 CFR part 121 within its organization. When an air carrier sets safety standards higher than what is required by regulation, it is referred to as a best practice. Assess and evaluate the following considerations with respect to this indicator:

- Best practices can be transferred from one air carrier to another; implementation of a best practice has the additional advantage of transferring the safety philosophy or emphasis from one air carrier to another. Implementation of best practices by the air carrier may indicate that less FAA surveillance is required.
- Determine if the air carrier has developed best practices within its systems, subsystems, and elements. If so, identify and assess these best practices. Consider whether or not they provide the air carrier and the aviation industry with a validated, superior method that enhances a regulatory standard, contributes to performance improvements, and enhances the level of operating safety. Best practices are an important measure of the air carrier's commitment to quality and safety. Where a documented best practice exists within an air carrier organization or system, surveillance may potentially be reduced.
- Determine how the best practice was implemented. Ascertain if the original intent of the best practice remains valid and the safety standard in the area addressed by the best practice remains at, or higher than, the required level. If there has been any negative change in the safety standard based on the air carrier's implementation of the best practice, further investigation may be warranted.
- Consider the air carrier's process/control for continuously improving best practices. Determine if the air carrier has a continuous improvement process and, if so, where it is located within the organization. Consider whether the improvement process is independent of the best practice itself and the related air carrier system. Consider whether management is committed to this type of best practice process improvement and to implementing changes to the best practice.

Resource Management Training

Under Advisory Circular 120-51B, per the regulation, part 121 certificate holders must have provided crew resource management (CRM) training for flight crewmembers by March 19, 1998 and CRM training for flight attendants and dispatch resource management (DRM) training for aircraft dispatchers by March 19, 1999. Implementing or having access to an effective resource management training program for flight crewmembers, flight attendants, dispatchers, and other employees is a positive indication of the air carrier's operational stability and commitment to safety. Management of these key resources can be enhanced through an effective resource management training program. Implementation of this type of training for other employees, such as maintenance and station operations personnel, where it is not required by regulation, is a further indication of the air carrier's commitment to quality and safety. A highly effective, validated resource management training program for all air carrier personnel could constitute a best practice. Consider the following when rating the effectiveness of the air carrier's resource management training program:

- Determine how the air carrier has implemented the CRM and DRM training requirements. If the air carrier has decided not to provide internal CRM and DRM training, determine if it has made the necessary arrangements to train their flight crewmembers, flight attendants, and dispatchers through another certificate holder. Consider the structure of the CRM and DRM training programs, and whether they include both initial and recurrent training.
- Determine the effectiveness of the resource management training program. Determine whether it meets or exceeds what is required by regulation. Consider any collected performance data available for FAA review that could be used to assess the program effectiveness. An effective resource management training program, whether provided by the certificate holder or through another certificate holder, is a positive indication of the air carrier's commitment to its employees and its emphasis on safety and system stability. Effective CRM and DRM training programs might not warrant high levels of surveillance.
- Consider whether the air carrier implemented CRM and DRM within areas of the organization where it is not required by regulation. If so, determine if it has been proven effective. Consider whether both initial and recurrent training are included.
- Consider the effectiveness of training aids, devices, methods, and procedures incorporated in the CRM and DRM training programs. Consider whether the air carrier responds, in a timely and cost effective manner, to FAA requests for CRM and DRM curriculum adjustments and modifications. Consider the quality of the adjustments and modifications made by the air carrier.
- Consider the air carrier's position on correcting deficiencies identified through the CRM and DRM programs. If the air carrier immediately implements controls to correct the deficiencies in a manner acceptable to the FAA, further surveillance at this time may not be warranted. If, however, the air carrier does not have a strong corrective action plan and process, additional surveillance may be necessary.

Risk Management

Risk management is a continuous management activity dedicated to ensuring that risk is identified, eliminated, or controlled within defined program risk parameters. Safety risk is an expression of the probability and impact of an undesired event in terms of hazard severity and likelihood. Within an air carrier, a safety risk can apply to systems, subsystems, and elements, as well as operational and maintenance procedures. Safety risks can be triggered by both internal and external events. To ensure the operational stability of their organization, air carriers may employ a risk management methodology to proactively plan for, identify, analyze, assess, and manage risks. A proactive, well-documented process that allows the air carrier to effectively respond to risks can have a positive impact on quality and safety. The lack of a risk management process can place the air carrier in the position of reacting to risks rather than managing them. A quick and determined response to a risk is a positive indication of the air carrier's system stability and emphasis on safety. Consider the following when rating the air carrier's risk management methodology:

- Consider the air carrier's overall risk philosophy. Consider whether the air carrier's approach to risk management is proactive or reactive. Observe how the organization reacts to a risk or a change that could incur risk. If the air carrier places a strong emphasis on safety, cooperation, and corrective action, it will generally have a more visible, proactive response to risk.
- Determine whether the air carrier has a formal risk management process. Consider whether the air carrier has documented planning, hazard identification, hazard analysis, hazard assessment, and risk management steps. Determine whether the air carrier's process allows it to quickly plan for, identify, and manage potential hazards, and make competent risk management decisions. An effective, well-documented, and proactive process is a positive indication of the air carrier's approach to risk management and safety.
- Determine whether the air carrier has been successful in controlling risks within the organization and implementing corrective action using its risk management process. Consider whether the process provides the means to accept, transfer, avoid, and mitigate the risk.
- Consider if the air carrier has a well-designed and effective means of communicating risk management-related information and the results of risk management activities throughout the organization. A strong response on the part of management, a willingness to communicate openly with all affected parties, and the capability to establish and maintain a good working relationship between air carrier personnel and the FAA, can have a positive impact on quality and safety.
- Consider the air carrier's decisionmaking process. Determine whether the air carrier has an internal planning process to gather the information necessary for competent risk management decision-making. Consider whether the air carrier uses simple experiential decisionmaking or more sophisticated techniques such as simulation, reliability analysis, fault or hazard tree analysis, or other tools. Determine if the selected technique provides the air carrier with the information necessary to make reliable risk decisions.
- Consider the air carrier's hazard identification process. Determine whether the air carrier has an analytic process to identify and validate hazards. If so, does it also have the capability to

properly evaluate the significance and probability of the hazards, including a review and assessment of its systems and system interfaces? Complex systems may require modeling tools, simulations, and other methods of analysis to establish critical paths and interfaces. Consider how the air carrier determines if identified hazards are under acceptable control or if corrective action is required.

- Consider the impact of organizational change on the air carrier's risk management philosophy. Ascertain whether the air carrier is currently managing or anticipating additional risk to its operation. Determine if the current or anticipated risk could have an operational impact on safety or quality. Determine the effectiveness of the risk management process during change. Consider the impact of personnel changes. Determine the impact of cost cutting and greater "bottom line" pressure.
- Determine the impact of risk on the air carrier's system controls. If segments of the air carrier's operation and the related system controls are affected by a risk, consider how the system controls respond to the risk. Also consider how the air carrier responds to any impact that the risk has on the system controls.

Cooperative Relationship with the FAA

A cooperative relationship between an air carrier and assigned FAA personnel may be a positive indication of the operational stability of the air carrier. Strong communication, a high level of trust, and a good working relationship between key air carrier personnel and the FAA personnel assigned to monitor the air carrier, can also have a positive impact on quality and safety. A weak communications infrastructure and a lack of trust between parties can have a negative impact on air carrier operations, quality, and safety. This, in turn, can affect the stability of the air carrier's systems. Consider the following when rating the relationship between the air carrier and assigned FAA personnel:

- Determine if there is a good working relationship between air carrier and FAA personnel. If there is a history of strong two-way communications and a good working rapport, the relationship should be stable and secure.
- Consider whether the air carrier is willing to share data and findings with the FAA. Where high quality information is readily accessible and available to the FAA, less surveillance may be warranted.
- Consider whether or not the air carrier is willing to conduct joint inspections with the FAA and welcomes FAA recommendations and suggestions.

Human Factors

Human factors are the overall set of operating, system, safety, ergonomic, and environmental considerations that the air carrier has implemented to ensure the safety, health, well-being, motivation, and continued effectiveness and performance of their employees. In a well-functioning organization, human factors are built into every aspect of the business. An organization that emphasizes human factors values its employees as a resource without which they would not be able to succeed. Given the labor-intensiveness of most air carriers, human factors could be a critical component of their safety profile and their financial success. Consider the following when rating this indicator:

- Consider whether or not the air carrier has a specific program that addresses human factors. Are human factors integrated into all aspects of the air carrier's operation? Does the air carrier have a separate department or unit within the organization dedicated to human factors? Determine how the air carrier handles human factors and the effectiveness of the human factors within their operations. Consider whether or not human factors have corporate level support within the organization. A corporate human factors policy or philosophy can go a long way toward ensuring the application of human factors throughout the organization. Determine if the air carrier's application of human factors has an impact on the safety of its systems.
- Determine how human factors are actually applied within the air carrier organization. Does the air carrier have a human factors training program, or does the air carrier integrate human factors into all aspects of its training program? Does the air carrier try to help its employees succeed in applying safety through human factors? In other words, does the air carrier look at the reasons for errors and safety problems and try to educate its employees on how to correct problems and errors rather than firing or transferring employees? Does it have a process to ascertain the root cause of human factors problems?
- Consider how the application of human factors within the air carrier enhances or hinders the safety of the air carrier's systems and environment. Have human factors been built into the air carrier's CAS and safety systems? If so, do the training programs that support these systems also incorporate the related human factor tools and techniques? Consistent application of human factors is critical to its success.
- Determine if the air carrier participates in the Maintenance Error Decision Aid (MEDA) program. Programs such as MEDA are designed to enhance human factors within an organization and can be used as powerful and effective education and training tools.

Operational Risks/Performance History Indicators

Enforcement Actions

Enforcement actions provide an indication of the air carrier's performance history. They are the reported results of any administrative and/or legal enforcement that the FAA has taken against an air carrier and/or certificated personnel to require compliance with the regulations.

To be most effective, this data must be reviewed and analyzed in conjunction with the air carrier's corrective action plan and results. Taken together, the Enforcement Investigation Reports (EIR), the FAA recommendations, and the air carrier's corrective actions can provide insight into the air carrier's response to problems identified in its environment. Analysis of this data provides one means of assessing the air carrier's safety and quality assurance profile; trends that are evident in the data may also indicate changes in management or operational philosophy. FAA enforcement actions, the air carrier's response to these actions, and trends in enforcement actions can have a significant impact on an air carrier's safety profile and potential for failure in an air carrier's systems, subsystems, and elements. Consider the following when rating this indicator:

- Consider the number, type, and criticality of the EIR. Enforcement actions can provide an indication of the stability of the air carrier and its systems. Consider if the EIR is repeated in the same or an interfacing area. Multiple EIRs, whether they address similar or dissimilar alleged violations, could be an indication of management, economic, and/or operational changes that could affect the air carrier's systems and safety profile. Compare the EIR to other air carrier activity reports (e.g., accidents, incidents, occurrences, complaints, Freedom of Information Act (FOIA), and Congressional inquiries). Consider the accident, incident, and occurrence data and its relationship to the EIR data.
- Consider the root cause of the EIR. Knowing why the air carrier is having problems in one area could provide an indication of problems that exist or are developing in another area. Consider what the EIR means from a systems perspective. Consider whether or not the alleged violation has an impact on the air carrier's major systems. Each EIR should be considered in light of all the systems that it could affect.
- Consider the air carrier's EIR performance history. Consider whether the air carrier has initiated corrective action and followup processes and procedures necessary to address the EIR in a manner that has a positive impact on operations, quality, and safety. A strong and determined response to an enforcement action is a positive indication of the air carrier's commitment to the regulations and to safety.
- Determine the strength of the applicable department's system controls. Consider whether or not the system controls are affected by the EIR, the FAA's recommendation, and any corrective action taken by the air carrier. If there are effects, consider how the system controls respond.
- Consider whether or not the EIR might have had an impact on any aspect of the air carrier's training program. If there is any impact, determine which aspects of the training program have been affected. Further, determine the implications of the impacts in terms of additional surveillance requirements.

Accidents/Incidents/Occurrences

Accident, incident, and occurrence data may provide a measure of the air carrier's performance history. An accident is an event associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury or in which the aircraft receives substantial damage. An incident is an event, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations. An occurrence is any event other than normal operations that is not an accident or incident. A near midair collision is an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or where a report is received from a pilot or other flight crewmember stating that a collision hazard existed between two or more aircraft.

The data associated with accidents, incidents, occurrences, and near midair collisions provide performance information related to the circumstances, the conduct of any related investigations, any safety recommendations made by FAA, and any corrective action taken by the air carrier. Collectively, this information may provide a point-in-time measure of the air carrier's performance and the FAA's recommended action in response to this performance. To be most effective, this data should be analyzed in conjunction with the air carrier's response, corrective action plan, and ongoing followup activities. When considered together and over a period of time, specific accident/incident/occurrence and other related data may provide insight into the air carrier's response to identified problems. Immediate response to accidents as well as performance history in this area can have a major impact on an air carrier's safety profile and potential for failure in its systems. Consider the following when rating this indicator:

- Consider the number, type, and criticality of the accident(s), incident(s), and occurrence(s). Those that are repeated in the same or an interfacing area provide some indication of the status of the air carrier and its systems. Repeated activity could be an indication of management, economic, and/or operational problems or changes that could affect the air carrier's systems.
- Consider the root cause of the accident(s), incident(s), and occurrence(s). Knowing why they happen could provide an indication of problems that are specific to the air carrier and/or problems that are systemic and could affect other air carriers. Consider what the accident means in terms of the air carrier's systems as well as the environment in which the air carrier operates. Each accident, incident, and occurrence should be considered in light of all the systems that it could affect.
- Accident, incident, and occurrence information is provided in a variety of different formats. Formats include: Aircraft Accident/Incident Preliminary Notices, FAA Accident Investigation Records, Investigation of Pilot Deviation Reports, Accident/Incident Corrective Action Records, etc. The information provided on these reports provides an indication of the air carrier's performance history and should be reviewed as part of the assessment of this indicator.
- Determine the strength of the air carrier's system controls. Consider whether the system controls are affected by the accident(s), incident(s), or occurrence(s), the FAA's

recommendation, and any corrective action taken by the air carrier. If so, consider how the system controls respond.

- Consider the air carrier's accident(s), incident(s), and/or occurrence(s) performance history. A strong and determined response is a positive indication of the air carrier's commitment to the regulations and to safety. A weak, quick-fix mentality could be an indication of the air carrier's unwillingness or inability to address the problems identified as a result of an accident, incident, or occurrence. Consider whether or not the air carrier has initiated corrective action and followup processes and procedures necessary to address the accident(s), incident(s), and occurrence(s) in a manner that has a positive impact on operations, quality, and safety. While additional surveillance may still be required, this type of positive response indicates the air carrier's commitment to safety and quality.
- Consider whether the accident(s), incident(s), and/or occurrence(s) should have had an impact on any aspect of the air carrier's training program. If so, determine which aspects of the training program have been affected. Further, determine the implications of the impacts in terms of additional surveillance requirements.

Department of Defense (DoD)/Regional Aviation Safety Inspector Program (RASIP)

The DoD Air Carrier Survey and Analysis Team is responsible, under Public Law 99-661 and other DoD directives, for monitoring the air carriers that do business with the DoD. The scope of its oversight includes major airlines, commuter airlines, air taxis, charters, and small air carriers. To meet this mission, it developed the DoD Commercial Air Carrier Quality & Safety (Q&S) Requirements to supplement its regulations and directives. Together, the regulations, directives, and Q&S requirements form the basis for the DoD surveillance auditing process. This process is documented on a structured Air Carrier Operations Survey Checklist. The results of this audit process are made available to the FAA for review. While the structure of the DoD surveillance auditing process varies from the FAA process, the results provide a unique view of the air carrier, as DoD is often an airline's largest customer and its process allows them to survey major air carriers every two years.

Consider the following when rating this indicator:

- Consider the scope and timing of previous RASIP inspections and DoD surveys. The results of these inspections/surveys can provide an indication of the stability of the air carrier and its systems. Determine if the most recent DoD survey was a complete (every two years) evaluation or a tabletop (every six months) review.
- Consider whether the results of a RASIP and/or DoD survey have affected systems, subsystems, or elements. Determine which aspects of the systems were affected. Further determine what these impacts might mean in terms of additional surveillance requirements.
- Consider whether or not the DoD has ever had to enforce any followup actions as a result of the DoD survey, including:
  - Put the air carrier on temporary non-use status and recertify them;
  - Put the air carrier on its Close Watch Program, which includes a tabletop review every month; or
  - Remove the air carrier from its list of qualified air carriers.
- Consider whether the DoD has ever had to raise surveillance issues to one of their higher authorities—either the Commercial Airlift Review Board (CARB) or the Commercial Air Carrier Authority. If so, how has the issue been resolved? Consider what these types of DoD actions and the results might mean in terms of further FAA surveillance requirements.

Self-Disclosures

Self-disclosures are intended to provide the air carrier with a means to generate safety information that may not be captured through the traditional reporting mechanisms. The details of the program are documented in AC 120-58, current edition. The self-disclosure process provides the air carrier and their employees with a means by which they can disclose information and identify possible violations of 14 CFR. Self-disclosure of this type of information may be a positive indication of the air carrier's commitment to addressing safety problems and proactively identifying potential safety hazards. It may also be a positive indication of the air carrier's emphasis on safety and willingness to better manage its safety profile. Self-disclosure of problems by the air carrier to the FAA can also heighten the trust that exists between the two entities and is a visible demonstration of cooperation. Trust and cooperation between air carrier and FAA personnel can have a positive impact on quality and safety. Consider the following when rating this indicator:

- Determine whether the air carrier has a self-disclosure process. Determine if the carrier's self-disclosure process results in timely, effective, and efficient reporting of information to the FAA. Consider how the air carrier has elected to implement the process and address the results of self-disclosed safety problems. Consider whether there are well-documented procedures for the self-disclosure process and for the continuous tracking and analysis of self-disclosed safety related issues. Determine how the self-disclosure process has been received by carrier management and personnel, and if management is encouraging the process.
- Consider if there is a well-designed and effective means of communicating the self-disclosure process to employees. Determine if and how the process specifications were communicated to employees. Determine if air carrier employees know that their employer is encouraging self-disclosure of problems and violations. Assess how the air carrier communicates the results of self-disclosed problems/violations internally. Determine if the air carrier shares and exchanges information that identifies actual or potential safety problems with all affected internal parties and FAA.
- Consider the overall effectiveness of the self-disclosure process. Consider how well the internal self-disclosure review and assessment process is working and if it is providing the means necessary to increase and improve the flow of safety information to all parties. Consider if the self-disclosure process has positively affected reducing problems or violations.
- Consider air carrier response to self-disclosures. Determine if there is a history of corrective action related to self-disclosure. Determine if the carrier has used the results of the self-disclosure process to retarget surveillance. Determine whether the air carrier immediately implements acceptable controls to correct problems identified through the self-disclosure process. Consider the carrier systems that have been affected by self-disclosures. Have the systems been affected to the point where their functionality or controls have been jeopardized? Has the carrier's corrective action process allowed it to manage the impact of self-disclosures on its systems?
- Consider whether the results of the carrier's self-disclosure process should have had an impact on any aspect of its training program. If so, determine which aspects of the training program have been affected. Further determine what actions the carrier took to ensure the ongoing

stability, quality, and safety of any affected aspects of its training program. Ascertain what these impacts might mean in terms of additional surveillance requirements

Safety Hotline/Complaints

A complaint is an expression or a formal charge of dissatisfaction made by any entity against the air carrier. Because of their position within the air transportation industry, both air carriers and FAA receive a variety of complaints. The complaints that affect surveillance planning are those received by FAA from consumers, vendors/suppliers, other air carriers, employees, and members of Congress or their constituents that may be related to air carrier or aircraft operations, maintenance, quality, stability, compliance, or safety. Requests for information that fall under the Freedom of Information Act (FOIA) that relate to an air carrier complaint should also be factored into this indicator of the carrier's performance history. Complaint information and history as well as any actions taken as a result of a complaint provide an external view of how the carrier is perceived by consumers and within the industry. Problems identified through a simple complaint or series of complaints could indicate that the carrier is having trouble managing one or more systems. Consider the following when rating this indicator:

- Determine whether the air carrier has a process to address and manage complaints. Consider whether there are well-documented procedures for the complaint process and for the continuous tracking and analysis of complaint-related issues. Consider how the carrier assesses, analyzes, and categorizes complaints. Determine if certain types of complaints are given more credence or weight than other types of complaints. Determine how the complaint resolution process interfaces with the carrier self-disclosure process.
- Consider if there is a well-designed and effective means of communicating the complaint process to employees. Assess how the carrier communicates the results of the complaint resolution process internally. Determine if the air carrier shares and exchanges information that identifies actual or potential safety problems with all affected internal parties and FAA.
- Consider the overall effectiveness of the complaint process. Consider how well the internal complaint review and assessment process is working and if it is providing a means to improve operations and safety. Determine if the process has positively affected reducing problems or violations. Consider the impact of the complaint resolution process on the carrier. Consider whether the carrier's systems have been affected by complaints. Further consider whether the carrier recognizes the impact on its systems and takes action to correct the problems.
- Consider air carrier response to complaints. Determine whether the air carrier's corrective action process has allowed it to effectively manage the impact of complaints on its systems. Consider how the air carrier involves employees, management, and FAA in the complaint resolution process. Also consider the carrier's position on complaints in the context of further surveillance requirements.
- Determine if the air carrier has used the results of the complaint resolution process to enhance safety. If the air carrier does not have a strong corrective action plan and process, or no history of corrective action related to complaint resolution, additional surveillance may be warranted.
- Determine whether the complaint should have affected any aspect of the carrier's training program. If so, determine which aspects of the training program have been affected. Consider what these impacts might mean in terms of additional surveillance requirements.

New Entrant Carrier

A new entrant carrier is an air carrier that has conducted operations under part 121 for less than five years. At the point of initial certification, FAA requires an applicant to demonstrate that it has the resources and required operations, maintenance, and training programs to run the air carrier. FAA issues its certificate based on this demonstration of air carrier management and operational capability. Similarly, the Office of the Secretary of Transportation (OST) issues its economic authority based on the management structure and financial resources in place to support the applicant's initial operating plan.

From the time of initial certification through the first five years of operation, the air carrier's continuing fitness is reaffirmed through the surveillance process. Surveillance of new entrant carriers is often difficult because of the lack of history and data associated with the air carrier. Newly certificated air carriers may require additional surveillance to determine that they have the resources and infrastructure necessary to support stable, safe operations and growth.

The new surveillance planning and targeting process and the CSP provide for an environment where the surveillance of new entrant air carrier systems cannot be reduced from the baseline levels. Surveillance of new entrant air carrier systems can, however, be increased as a result of this assessment. If heightened surveillance is warranted, the plan will focus on assessing and verifying the air carrier's systems, subsystems, elements, operations, and maintenance procedures to ensure they are being followed. This will provide the PI with surveillance data from which to make certificate management decisions. Consider the following when rating this indicator:

- Determine if any risks for the new entrant air carrier have been identified. Consider any risks identified as a result of surveillance results or periodic safety and financial fitness reviews. Consider any risks identified in the air carrier's outsourcing, fleet mix, growth rate, or other high-risk programs or triggers. Determine if the risks warrant targeted surveillance in specific areas.
- Consider whether or not the air carrier has provided the FAA with a revised business plan. This should include a projection of its expected growth and/or an explanation of how it will manage expected growth with respect to safety. Was the air carrier able to effectively manage and support growth or change in its systems? Determine what the results of any growth or change might mean in terms of additional surveillance.
- Determine if an air carrier has a growth model available for surveillance planning purposes. This model should depict what the air carrier needs from a safety perspective to operate its current fleet of aircraft and what is required for a larger operation as the air carrier grows. If so, run the model based on any changes in the air carrier's configuration and/or environment. Consider the results in terms of the air carrier's systems, subsystems, and elements. Interpret the results of the modeling exercise in terms of planning surveillance requirements.
- Consider if any operational limitations have been imposed on the new entrant air carrier's operations specifications (OpSpecs). Limitations may be on the size and/or number of aircraft types, makes, or models, and/or the scope of its operations. Consider why these limitations were imposed and what the air carrier has done to prove its capability to manage current operations without compromising safety. Determine how the air carrier is performing at its

current level of operations and what the results of this analysis mean in terms of surveillance requirements.

SPAS Trend Indicators

SPAS trend indicators provide an indication of the performance history of the air carrier over time. They include all of the SPAS performance measures except those related to changes in key personnel and carrier credit ratings. SPAS trend information is available in different formats, can be used to drill down to a detailed level, is available for five previous years, and can be used to compare the carrier to its own records or to the average performance of the entire industry segment in which it is categorized. Program Tracking and Reporting Subsystem (PTRS) data is used to compile and track the changes in these categories.

Individual, comparative, and subject analyses can be completed with this set of measures. Individual analyses can be used to detect developing trends by comparing current to past carrier performance. Comparative analyses can be completed to determine national trends and to compare the performance of the carrier to other carriers in their peer group. Subject analyses can be completed to identify specific problems that an air carrier may be having in a specific subject area. These analyses can provide an indication of changes in air carrier maintenance and operations. These types of changes can have a significant impact—positive or negative—on an air carrier's systems, subsystems, and elements. The PI must determine the appropriate type and level of SPAS trend analysis based on the subject area, data availability, complexity of the certificate, and past surveillance results.

Consider the following when rating this indicator:

- Major changes, whether favorable or unfavorable, in the SPAS trend indicators can provide an indication of the stability of the air carrier and its systems. A large percentage of change over a twelve-month period may be an indication of operational changes that could affect the air carrier's safety profile. Look for trends in performance based on past history and group performance. Consider how the trend may affect the carrier's systems, subsystems, and elements. Where necessary, drill down to specific events to review the underlying data.
- The reason behind any change(s) in trends is also important. A favorable change could indicate that the air carrier is taking steps to improve performance based on prior surveillance results. An unfavorable change could indicate that a problem exists or is developing. Each change should be considered in light of the systems that it could affect.
- The rate of change in the SPAS trend indicators is also important. If the change is gradual, steady, and evidenced over a reasonable period of time, then there may be no cause for concern. However, a change that is abrupt, haphazard, uncoordinated, and/or occurs over a short timeframe may be a sign of potential trouble. Look for explanations as to why the trend and any changes occurred. Consider the corrective action that was taken.
- Try to place the trend in context with other air carrier activities. The present configuration of SPAS does not generate alerts based on air carrier outsourcing or growth rates. Consider the trend in light of any changes in the carrier's economic position or operating rules. Has the carrier experienced rapid growth or expansion? Has the carrier contracted to outsource its maintenance or training programs? Determine if these types of external changes could have an impact on the trend data available through SPAS.

- Determine if any relationships exist between the various SPAS performance measures. Consider any trends that become apparent based on these relationships. Identify potential adjustments to surveillance requirements.
- Consider whether the SPAS trend indicators might have had an impact on any aspect of the carrier's training program. If so, determine which aspects of the training program might have been affected. Further, determine what these impacts might mean in terms of additional surveillance requirements.

Operational Risks/Environmental Criticality Indicators

Age of Fleet

Currently, jets in the U.S. commercial fleet average sixteen years of age. From FAA's perspective, aging aircraft are defined as aircraft of any make or model that are fifteen years or older. Much of the current U.S. commercial fleet of jets, therefore, can be considered aging aircraft. This is an important safety consideration as additional surveillance may be required. To ensure aging aircraft are safe, air carriers perform detailed inspections at set intervals. The age of the fleet also has an impact on the carrier's systems, subsystems, and elements. As most aging aircraft contain aging systems that lack the technology and sophistication of newer aircraft, the associated training must be leveled to meet the system requirements. The age of the aircraft in the fleet is also important from a new entrant carrier perspective. The age of the new entrant's fleet must be taken into consideration for developing the surveillance plan. Consider the following when rating this indicator:

- Determine by make and model what percentage of the air carrier's fleet is aging aircraft.
- Determine whether the air carrier has a process to survey and inspect aging aircraft. Determine if the process has been able to identify and evaluate all aging aircraft in the fleet on the required intervals. Consider how the carrier documents the results of surveillance and inspection, and appropriately adjusts the required inspection intervals.
- Determine the overall effectiveness of the aging aircraft identification process. Consider whether it has allowed the air carrier to manage the operational risk associated with aging aircraft. Consider what the age of the air carrier's fleet and the internal surveillance process means in terms of surveillance requirements.
- Consider the impact of aging aircraft on the air carrier's maintenance program. Consider whether or not the air carrier recognizes the impact of an aging fleet on the maintenance program, systems, subsystems, and elements. Are the program and the related infrastructure adequate enough to meet the enhanced requirements associated with aging aircraft?
- Determine if the air carrier immediately implements controls to correct problems with its aging aircraft or related systems, subsystems, and elements in a manner acceptable to FAA. An air carrier having a strong corrective action plan and policy indicates its commitment to maintaining a safe fleet of aging aircraft. If the air carrier does not have a corrective action plan, controls, and processes, additional surveillance may be warranted. Determine whether or not the air carrier's corrective action process has allowed it to effectively manage the impact of aging aircraft on its maintenance program and systems. Consider what these impacts might mean in terms of additional surveillance requirements.
- Consider if there is a well-designed and effective means of communicating the maintenance requirements associated with the aging fleet to employees. Determine if the air carrier shares and exchanges information that identifies actual or potential safety problems associated with its aging aircraft with all affected internal parties and FAA. Consider the effectiveness of the communications process and if it provides a means to improve operations and safety.

Varied Fleet Mix and Mixed Fleet Configuration

A varied fleet mix exists when an air carrier uses different series of aircraft and multiple types within the same fleet. A mixed fleet configuration exists when an air carrier uses a variety of different aircraft types or a mix of models of the same type within the same fleet. Many established carriers have long operated a varied mixed fleet and/or mixed fleet configurations. The implications for operating this type of fleet are even more significant for new entrant carriers, where resources and infrastructure may be a major consideration. These types of environments can significantly affect an air carrier's safety profile and the potential for failure in its systems, subsystems, or elements. Consider the following when rating this indicator:

- Consider whether the air carrier has the resources and infrastructure to support a varied fleet mix operations and/or mixed fleet configuration. Determine whether the air carrier's management structure and operations approach have been adequate enough to handle the impact of a varied fleet mix and/or mixed fleet configuration. A varied fleet mix increases the demands for managing different maintenance procedures and processes, multiple maintenance manuals, crewmember and mechanic training, training manuals, ground support equipment, and scheduling and inventory costs. Consider the origin of the aircraft and what this means in terms of operational and system stability. Further determine what the air carrier's performance in this area might mean in terms of surveillance requirements.
- Consider the impact of a varied fleet mix and/or mixed fleet configuration on the air carrier's maintenance program. Determine if the systems, subsystems, elements, and related infrastructure are adequate enough to meet the complex requirements associated with operations of a varied fleet and/or a mixed fleet configuration. Is the air carrier's parts control system adequate and effective? Does the air carrier have the necessary test equipment?
- Consider the impact of a varied fleet mix and/or mixed fleet configuration on the air carrier's operations program. Determine if the operations systems, subsystems, elements, and related infrastructure are adequate enough to meet the complex requirements associated with operations of a varied fleet and/or a mixed fleet configuration. Are the air carrier's flight operations system controls adequate and effective? Does the carrier have the necessary controls to handle the different cockpit configurations that will be present in a varied fleet mix? Further consider whether the air carrier has recognized the impact on the systems, subsystems, and elements.
- Consider the strength of the air carrier's system controls. If they are well established with fully documented procedures, then the carrier may be able to have a varied fleet mix or mixed fleet configuration without affecting safety. Ensure that the system controls are not adversely affected as the composition of the carrier changes.

Complexity of Aircraft

The complexity of the aircraft in the air carrier's fleet can significantly affect an air carrier's safety and the potential for failure in its systems, subsystems, or elements. A change in the complexity of the aircraft in the fleet can also affect operational and system stability. Complex aircraft generally incorporate more sophisticated technology. Often new or emerging technology is an extension or a further iteration of existing knowledge and methods. However, a change in complexity or technology may mean that the carrier must support both manual and automated processes and procedures for the different environments. Innovative technology can increase or decrease the potential for noncompliance with existing processes and controls. Consider the following when rating this indicator:

- Consider the type and age of the air carrier's technology. Complex aircraft are generally technology-driven, with more and diverse systems. The technology is considered complex when it is either new to the industry or the aircraft. Consider how the technology being introduced into the air carrier might affect the operations, maintenance, training programs, and systems. Further consider whether the air carrier is changing the sophistication level of technology (e.g., moving from the F28 to the F100) or implementing an entirely new type of technology (e.g., glass cockpit, Flight Management Systems (FMS), and fly-by-wire systems).
- Consider the air carrier's preparedness for the new or different technology. Determine if the air carrier had access to the production or maintenance history of the new technology. If so, this information can help the air carrier in transitioning the new technology into its operations. If this information was not available to the carrier, the transition could pose a potential safety issue. The absence of an established body of knowledge and experience (e.g., industry standards) or unavailability of this information to the air carrier indicates that additional surveillance may be appropriate.
- Consider the impact of new technology on the air carrier's systems, subsystems, and elements. The new technology may impact the air carrier's training program, tooling and testing equipment program, parts control and handling program, and the integration of these changes and differences across the carrier. Further consider whether the new technology places a requirement for special or additional equipment on the air carrier. If so, has the air carrier purchased and integrated the necessary equipment into its operation? Determine if the carrier will be able to support these types of changes throughout their operation. If not, there may be cause for additional surveillance.
- Consider the strength of the air carrier's system controls. If the systems are well-established with fully documented processes and controls built in then having new technology may not negatively affect quality or safety. Determine whether or not the carrier has adapted its system controls to meet the requirements of the new technology. Consider the impact of not adapting its system controls on surveillance requirements.
- Consider the air carrier's performance history with regard to new technology. If this history indicates that the air carrier has implemented the processes and procedures necessary to successfully integrate new technology, then additional changes in technology may not have negative impacts. If the carrier encountered problems with previous changes in technology, additional surveillance may be appropriate.

Outsource (Maintenance, Training, Ground Handling)

The current aviation industry is faced, more and more, with outsourcing of traditional carrier functions to independent contractors. While established air carriers outsource some of their major programs, the trend has been for the new entrant carriers with rapidly changing operations to start small and outsource high-cost items such as maintenance (M), training (T), and ground handling (GH). In addition, outsourcing has developed to the point where multiple levels of contractors could be involved in providing the service. The carrier's outsourcing policies can significantly affect its maintenance, training, and operations systems, subsystems and elements and its overall safety. Consider the following when rating this indicator:

- Consider the scope of the air carrier's outsourcing program. Does the air carrier outsource any functions in maintenance, training, and/or operations? Consider the different types of contractual arrangements, such as leasing, that may exist between the carrier and its contractors. Determine if the primary contractor subcontracts any of its services (e.g., a part 121 carrier may contract for maintenance with a certificated part 145 repair station who, in turn, contracts some of the services to licensed mechanics not employed by the part 145 repair station). Consider how the air carrier's outsourcing policies affect surveillance requirements.
- Consider the qualifications of contractors used by the air carrier for outsourcing. Determine if the contractors were approved by FAA prior to being authorized for use by the air carrier. Determine if FAA has completed any interim evaluations of the air carrier's contractors. If so, what were the results? Determine if all of the contractors performing substantial maintenance and training for an air carrier have been listed in the air carrier OpSpecs.
- Consider the maintenance function that has been contracted out by the air carrier. Has the air carrier outsourced substantial heavy maintenance or emergency limited maintenance? Does it include everything between emergency limited and substantial heavy maintenance, including B, C, and D checks? Outsourcing of maintenance could be at any level and could include anything not done by an employee of the air carrier.
- Consider the ground handling function that has been contracted out by the air carrier. Does the ground-handling contract include support personnel? Has the carrier bought or leased ground space from another carrier? Does the ground-handling contract include all station personnel? Ramp personnel only? Deicing personnel only? Fueling/refueling personnel only? Or some combination of ground-handling staff? If the carrier is small, does the ground-handling contract include maintenance?
- Consider the training program that has been contracted out by the air carrier. Determine if and how it addresses new hire requirements. Consider how the air carrier's outsourcing policies and contractual arrangements affect surveillance requirements.
- Consider the air carrier's oversight of the outsourcing program. The air carrier is responsible for ensuring that any outsourced maintenance, training, and ground-handling functions are conducted in accordance with the air carrier's manuals. Determine whether the air carrier has an effective oversight program to manage its contractors. Have the air carrier's systems, subsystems and elements been impacted by the lack of oversight? Determine if the air carrier's safety audit function has been enhanced to include the outsourced functions.

Seasonal Operations

Seasonal operations, or operations performed by an air carrier for a period of time during a particular season or time of year to satisfy a short-term need, can significantly affect an air carrier's safety. Seasonal operations, while limited in nature, require as much or more preparation and attention to the quality and safety of the services provided as regular operations. For example, carriers engaging in seasonal operations that occur during the winter months and target the consumer flying to and from ski resort areas must be prepared to manage aircraft de-icing and all of the associated requirements. If the air carrier does not normally fly this route, or only operates during the ski season, deicing may not be part of its regular operations. Consider the following when rating this indicator:

- Consider the scope of the air carrier's seasonal operations. Consider the quantity, type, and location of the air carrier's seasonal operations. Consider how the seasonal operations affect systems, subsystems, and elements.
- Consider the air carrier's performance history with regard to seasonal operations. Does the air carrier have experience in seasonal operations? Is that experience comparable to the air carrier's current seasonal operations? Has the air carrier encountered problems with seasonal operations? If so, additional surveillance may be appropriate.
- Consider whether the air carrier is structured and has systems, subsystems, and elements designed to support seasonal operations. Determine if the air carrier has implemented the processes and procedures necessary to properly manage seasonal operations. Determine the adequacy and effectiveness of the air carrier's infrastructure to support the seasonal operations.
- Consider the impact of seasonal operations on the air carrier's audit function. Determine if the audit function includes any special considerations that result from seasonal operations. Determine the carrier's capability to ensure that its core business functions during seasonal operations are fully integrated into its systems, subsystems, and elements and reflects positively on its management control and oversight.

Relocation/Closing of Facilities

Quality control across the various types of stations and the carrier's capability to manage an integrated set of station operations are critical. Relocation or closing of a facility or facilities can significantly affect an air carrier's safety and the potential for failure in its systems, subsystems, or elements. Relocation of a facility includes both adding a new facility and moving an existing facility to another site on the air carrier's approved route. Adding a new facility, relocating an existing facility, or closing a facility, can affect the air carrier's operational and system stability. The way maintenance, operations, and training programs are implemented and managed across a varied station base is an important criterion. This must be accomplished without affecting the quality and safety of ongoing operations. Consider the following when rating this indicator:

- Consider the number, type, and effectiveness of the stations maintained and managed by the air carrier. Determine if the carrier's facilities have remained relatively stable. Consider the number of new stations currently managed by the carrier. Consider the longevity of the facilities managed by the air carrier.
- Consider the air carrier's performance history with regard to relocation or closing of facilities. Determine whether the air carrier has effectively managed changes to facility bases. Consider the rate and pace at which the carrier adds, relocates, and/or closes facilities. If the change is steady, implemented over time, and is accompanied by appropriate training, documentation, and manual changes, it may be easily integrated into the current operation of the station(s). On the other hand, a change that is major, abrupt, haphazard, and/or occurs over a short timeframe may be a sign of potential trouble.
- Consider the impacts of adding, closing, or relocating a facility. New facilities may require more surveillance than older, established facilities. When the carrier adds a new facility, consider the background and experience of the personnel assigned to the new facility. Consider the impact that a change in facility has on the personnel requirements and whether the carrier has adequate resources and training. Determine if the addition, closing, or relocation has resulted in a change of station managers. The significance of the change in station management should be assessed to determine the potential impact on the carrier's system and operational stability. Further, if the changes of adding, closing, or relocating a facility are not consistently applied through training and procedures, and disseminated to personnel, the carrier may be faced with different and potentially inconsistent methods of operation. This can have a negative impact on both the quality and safety of the services provided by the station.
- Consider the strength of the air carrier's systems, processes and controls. Consistency in the carrier's systems and procedures is an indicator of its ability to manage a varied station base.

Lease Arrangements

The aviation industry operates in an environment that includes a variety of different leasing arrangements among air carriers and between air carriers and other business entities. These arrangements are increasingly used to meet market demands and seasonal operations. Not only have carriers begun to use a leasing option to obtain services, but the number and types of leasing arrangements have increased.

A lease is any agreement by a person (the lessor) to provide an aircraft to another person (the lessee) who will use the aircraft for compensation or hire purposes. A "wet lease" arrangement is a leasing agreement whereby a certificate holder agrees to provide an aircraft and at least one crewmember to another air carrier. In contrast, a "dry lease" arrangement is any agreement in which a lessor such as an air carrier, bank, or leasing company leases an aircraft without any crewmembers to an air carrier (the lessee) and in which the lessee maintains operational control. An "interchange agreement" is any agreement in which the operational control of an aircraft is transferred for short periods of time from one air carrier to another air carrier in which the latter air carrier assumes responsibility for the operation of the aircraft at the time of transfer.

The variety of leasing arrangements entered into by an air carrier can have a significant impact on its maintenance, training, and operations programs and its overall safety. Consider the following when rating this indicator:

- Determine the type of leasing arrangement the air carrier maintains. The air carrier may have a wet lease, dry lease, or interchange agreement in place with other entities.
- Consider whether the air carrier is structured and has systems, subsystems, and elements designed to support the lease arrangements. If the carrier has chosen to enter into one or more leasing arrangement, determine the adequacy and effectiveness of the air carrier's infrastructure to support these arrangements and its related oversight responsibilities. Consider the effect of the air carrier's leasing arrangements on surveillance requirements.
- Consider the impacts of interchange agreement systems, subsystems, and elements. Interchange agreements can have a major impact on normal carrier operations; therefore, special attention during surveillance may be warranted when an air carrier is a party to this type of arrangement.
- Consider the impact of lease agreements on the air carrier's systems, subsystems, and elements. Consider whether or not any special lease requirements have been integrated into the systems. Determine if the air carrier's audit function has been enhanced to include any special considerations resulting from any of the air carrier's leasing arrangements.

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Figure 3-1. Sample Cover Memo for Inspector Work Plan Submittal

U.S. Department
of Transportation

**Federal Aviation
Administration**

Memorandum

Subject: ACTION: [Carrier ID] CMT Inspector Work Plan Date:

From: [Principal Inspector] Reply to
Attn. of:

To: Manager, [FSDO ID] FSDO

The attached inspector work plan for FY01 is submitted for [Inspector Name].

If the resources are available and adequate to support the inspector work plan, please indicate your concurrence by signing below and returning by fax to [Fax Number], attention [Principal Inspector].
Forward the inspector work plan to the inspector as assigned.

If the resources are not available and adequate to support the inspector work plan, please indicate your non-concurrence by signing below and returning by fax to [Fax Number], attention [Principal Inspector].
In accordance with ATOS procedures, you must also send a memo to the manager, to [CHDO/CMO ID], with a copy to your Flight Standards division manager, documenting your reasons for non-concurrence. The manager, [CHDO/CMO ID], will then contact you to discuss the memo and attempt to resolve the resource issue.

Concurrence: _____ Non-Concurrence: _____

Signature *Title* *Signature* *Title*

Date: Date:

Attachment

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Figure 4-2. ATOS Surveillance Implementation Guidelines

- **Air Transportation Oversight System (ATOS) is not a Program Tracking and Reporting Subsystem (PTRS)**
  - The ATOS inspector work plan replaces the work plans generated under the National Program Guidelines (NPG); it is not a substitute for PTRS.
  - Inspectors must not think in terms of PTRS and use ATOS for work or time accountability.
  - ATOS entries are not designed to account for an inspector's time. Entries should not be made just to demonstrate work activity.
  - Inspectors must not do PTRS-type activities disguised as ATOS.
  - ATOS is a system safety based approach to air carrier oversight that should be applied in its entirety and therefore, should not be dismantled.

- **Planning is critical in ATOS**
  - The Comprehensive Surveillance Plan (CSP) provides the Certificate Management Team (CMT) with a plan that is tailored to the surveillance requirements for its air carrier.
  - Inspectors should not do the work activities first and then figure out how to plug them into the system. That is *not* a system safety approach.
  - Planning for ATOS surveillance implementation starts with the principal inspectors (PI) who should include instructions on the type, location, and timing of inspection activities.
  - The PI may give instructions for the completion of a Safety Attribute Inspection (SAI) or an Element Performance Inspection (EPI) by a specific date, certain locations, or specific makes/models.
  - The PI can help to ensure the CMT receives surveillance results in a timely manner by using the instructions feature in the CSP to prioritize inspections and set reasonable timelines for completion.

- **The first step for conducting ATOS surveillance is to review the inspector work plan**
  - The inspector reviews the inspector work plan and coordinates the inspection activities with his or her schedule.
  - Geographic inspectors have an additional responsibility to coordinate and communicate their activities in completion of the inspector work plan with both their supervisor and the CMT principal.

- **The next step for conducting ATOS surveillance is preparation for the assigned inspection**
  - Preparation is essential and extensive for the first such inspection conducted by the inspector.
  - Preparation starts with a thorough review of the applicable Data Collection Tool (DCT).
  - The ATOS DCTs list all pertinent regulations, policy, advisory documents, and job task items that pertain to the inspection.
  - The inspector should use the DCTs to research and refresh his/her knowledge appropriately and to plan and prepare for an inspection.

— The inspector applies his/her planning and judgment to select the numbers and locations of inspection activities to perform to be able to answer all of the questions in a thorough and quality manner.

- **General guidance for planning inspection activities**
  — The key question the inspector should consider when determining how many activities to plan is: "Are the events likely to vary over time and place?"
  — Next, the inspector reviews the specific DCT and thinks about the purpose of that element.
    – For an SAI, the inspector determines how he/she can review and gain an understanding of the certificate holder's policies and procedures for the element they are inspecting.
    – For an EPI, the inspector determines how he/she can tell if the function or process is being performed correctly.
    – The inspector should be thinking about events that are directly observable and will give him/her an idea of what the process is or how the process works.
  — Each activity should consist of stand-alone and observable events.
  — Most EPI activities will lead to observing the aircraft or flight operations if all aspects of the element are fully examined.
  — Surveillance is making observations and recording those observations at the most basic level.

- **It is not appropriate to combine SAIs and EPIs**
  — SAI and EPI inspection activities have different purposes.
    – The SAI determines if there is a system in place and if that system incorporates the safety attributes.
    – The EPI validates the performance of the system to determine if the operator is following the system procedures and if that system is accomplishing the desired result of safety and regulatory compliance.
  — Simultaneously doing an SAI and EPI is not appropriate.
  — The same person should not do both the SAI and EPI for an element. An independent look may provide better information.

- **The DCTs are not checklists**
  — Each DCT lists a series of questions for the inspector or team of inspectors to answer.
  — The numbered questions in all DCTs require either "Yes" or "No" responses and, in some cases, "Not Applicable" (N/A).
  — The inspector plans individual activities that will help the inspector answer the questions.

- **It generally takes *multiple* activities to complete an inspection**
  — Responses are entered only for those questions that can be answered from the single activity being reported.
  — It does not matter how many questions are answered during each activity, as long as all the questions are answered by the time the report is saved as final.

- **DCTs are completed based on surveillance activities**
  - DCTs are not designed to be a series of questions to ask the air carrier's personnel.
  - It is inappropriate to give the air carrier a copy of the DCT to fill out.
  - The inspector should ask his or her own questions to find out about the policies and procedures of the air carrier.
  - The inspector should not ask a person if he/she is responsible. Rather, inspectors ask questions, make observations, and perform other tests to find out enough about how the carrier performs that process to determine for themselves who is responsible.

- **The DCT questions must not be re-written by CMTs or inspectors**
  - This will corrupt the data entered into the ATOS repository and invalidate the system.

- **Performing assigned SAIs**
  - SAIs are completed by a team of inspectors or a single inspector to evaluate a subsystem or a portion of a subsystem. Each team member completes certain elements within a system, or a particular attribute section, or possibly certain questions within an attribute section. This allows the distribution of inspection activity among the SAI team to obtain accurate data in a timely manner.
  - After performing their inspection activities, each SAI team member reports his or her own responses into ATOS automation.
  - Although communication between team members is essential, there is no need to share answers between team members for the purpose of having each team member answer every question. In fact, this is an undesirable action resulting in duplication.
  - SAI team coordinators (TC) play an important role in organizing and coordinating SAI team activities.
  - The SAI TC, in conjunction with the remaining SAI team members, divides and distributes the SAI activities.
  - The TC ensures that activities, such as personnel interviews, are not repetitive or redundant, and that all activities are completed to accurately answer the questions on the SAI.
  - The TC is a leadership role that should be assigned to an experienced inspector, with a solid knowledge of the air carrier, who is based near the location where most SAI activities will take place.
  - The TC is not a supervisor and is not responsible for team member performance.
  - If the TC encounters difficulties with a team member during an inspection, the situation should be elevated through the PI to that team member's supervisor for resolution.
  - As a general rule, most SAIs should be completed within 120 days. This timeframe begins on the date when the first activity is opened and ends when the last activity is saved to final and the record containing all associated activities is saved to the master record by the TC. This timeframe does not include the data evaluation process. This will provide a continuous flow of information for determining whether retargeting is necessary.

- **Performing assigned EPIs**
  - PIs may recommend *a minimum number, location, and scope* of inspection activities, but the Inspector assigned the EPI has the responsibility for identifying the number of

activities needed to make the assessment to include complying with the PIs minimum recommendations.

— The number of activities required to answer all EPI questions varies depending on the complexity of the air carrier system, the size of the air carrier and other factors. Generally, it takes at least 5-10 surveillance activities to answer all the EPI questions.

— As a general rule, most EPIs should be completed within 90 days. This timeframe begins on the date when the inspector opens the first activity and ends when the last activity is saved to final and the record containing all associated activities is saved to the master record by the inspector. This timeframe does not include the data evaluation process. This will provide a continuous flow of information for determining whether retargeting is necessary.

— The aviation safety inspector (ASI) will accomplish EPIs in accordance with the specific instructions on the DCT and any additional written instructions from the PI.

— The number of individual activities necessary to accomplish this EPI can be coordinated between the PI and the assigned ASI.

— When completing an individual activity for an EPI, the ASI will answer and enter responses only to those questions that can be answered from the activity being reported.

- **Observations outside the CSP**

— Certain surveillance observations outside the comprehensive surveillance planning process can be reported using the Dynamic Observation Report (DOR) and the Constructed Dynamic Observation Report (ConDOR).

— DORs and ConDORs are not a substitution for the planned and targeted surveillance that is included in the CSP and are not intended for routine use.

— Managers, supervisors, and inspectors may use the DOR to record an unplanned observation on any ATOS air carrier.

— ConDORs may be constructed with SAI and/or EPI questions and all questions must be answered.

- **Observations requiring immediate action**

— Significant issues or items of immediate concern, as determined by the inspector, will be verbally conveyed to the PI in a timely manner.

— This is not a departure from what conscientious inspectors have always done in the past when they observed a safety concern or possible regulatory violation.

— Pick up the telephone and call the appropriate PI, assistant PI, aircrew program manager (APM), partial program manager (PPM), or cabin safety inspector (CSI) at the certificate-holding district office (CHDO)/certificate management office (CMO), or send an e-mail message or a fax. The key point is to coordinate with the PI and work with the CMT to determine appropriate actions.

Figure 4-3. Safety Attribute Inspection (SAI)

Figure 4-3-1, Sample Safety Attribute Inspection (SAI) 1.x Data Collection Tool Data Collection Tool

Figure 4-3-2, General Instructions for Completion of Safety Attribute Inspection (SAI) 1.x Data Collection Tools

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Figure 4-3-1. Sample Safety Attribute Inspection (SAI) 1.x Data Collection Tool

Safety Attribute Inspection (SAI) Data Collection Tool 1.3.7 Outsource Organization (AW)

ELEMENT SUMMARY INFORMATION

Purpose of This Element (Certificate Holder's responsibility):

- To ensure when making arrangements with other persons to perform maintenance, preventive maintenance, or alterations of its aircraft, including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof, the performance is in accordance with its continuous airworthiness maintenance program (CAMP), maintenance manual and the regulations of Title 14 of the Code of Federal Regulations (14 CFR).

Objective (FAA oversight responsibility):

- To determine if the certificate holder's Outsource Organization process meets all applicable requirements of 14 CFR and Federal Aviation Administration (FAA) policies.
- To determine if the certificate holder's Outsource Organization process incorporates the system safety attributes.
- To identify any shortfalls in the certificate holder's Outsource Organization process.

Specific Instructions:

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SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
  119.43(b)
  119.43(b)(1)
  119.43(b)(2)
  119.43(c)
  121.135(a)(1)
  121.135(b)(1)
  121.135(b)(2)
  121.135(b)(3)

121.363(b)
121.365(a)
121.365(b)
121.365(c)
121.367
121.367(a)
121.367(b)
121.367(c)
121.369(a)
121.369(b)
121.369(b)(1)
121.369(b)(3)
121.369(b)(4)
121.369(b)(5)
121.369(b)(6)
121.369(b)(7)
121.369(b)(8)
121.369(b)(9)
121.371(a)
121.371(b)
121.371(c)
121.371(d)
121.373(a)
121.375
121.377
121.378(a)
121.378(b)
121.379(a)
121.380
121.457(b)
121.703
121.703(g)
121.705
121.709(a)
D.072(c)
D.091
D.091(a)
D.091(b)
D.091(c)
D.091(d)
D.091(e)
D.091(f)
D.091(g)

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
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- FAA Policy/Guidance:
  FAA Order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapter 69

SAI SECTION 1 - PROCEDURES ATTRIBUTE

Objective: Procedures, instructions, and information contained in the certificate holder's manual are documented methods for accomplishing a process. Policies contained in the certificate holder's manual should establish the certificate holder's compliance posture. Policies may not be stand-alone statements but may be imbedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where and how. This section contains policy questions, procedural questions, and instructional or informational questions pertaining to various types of certificate holder requirements such as actions, prohibitions, or resources (i.e., personnel, facilities, equipment, technical data, etc.).

Tasks

To meet this objective, the inspector must accomplish the following tasks:

1	Review the information listed in the supplemental information section of this DCT.
2	Review the duties and responsibilities for management and other personnel identified by the certificate holder who accomplish the Outsource Organization process.
3	Review the certificate holder's manual to ensure that it contains policies, procedures, instructions, and information necessary for the Outsource Organization process.

Questions

To meet this objective, the inspector must answer the following questions:

1.	Does the content of the certificate holder's manual meet the specific regulatory and FAA policy requirements for an Outsource Organization process?	
1.1	Does the certificate holder's manual contain general policies for the Outsource Organization process that comply with the SRRs? SRRs: 121.135(b)(1); 121.363(b); 121.365(a); 121.365(b); 121.365(c); 121.371(a); 121.371(b); 121.371(c); 121.371(d); 121.373(a); 121.375; 121.377; 121.378(a); 121.379(a); 121.457(b); 121.703(g); 121.709(a); D.091	☐ Yes ☐ No, Explain
1.2	Does the certificate holder's manual cite the regulatory requirements listed in the supplemental information section of this safety attribute inspection (SAI)? SRRs: 121.135(b)(3)	☐ Yes ☐ No, Explain
1.3	Does the certificate holder's manual contain the duties and responsibilities for personnel who will accomplish the Outsource Organization process? SRRs: 121.135(b)(2)	☐ Yes ☐ No, Explain
1.4	Does the certificate holder's manual include instructions and information for personnel to meet the requirements of the Outsource Organization process? SRRs: 121.135(a)(1)	☐ Yes ☐ No, Explain
1.5	Does the certificate holder's inspection program and the program covering other maintenance, preventive maintenance, and alterations include instructions and information necessary for personnel to ensure that: SRRs: 121.135(a)(1); 121.367	
1.5.1	Maintenance, preventative maintenance, and alterations performed by other persons is performed in accordance with the certificate holder's manual? SRRs: 121.367(a) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.2.5-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.6-aw; 1.3.8-aw; 1.3.9-aw; 1.3.10-aw; 1.3.11-aw; 1.3.12-aw; 1.3.13-aw; 1.3.14-aw; 1.3.15-aw; 1.3.20-aw; 1.3.21-aw; 1.3.22-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 5.1.8-aw; 5.1.9-aw; 6.2.1-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain

1.5.2 Competent personnel are provided for the proper performance of maintenance, preventive maintenance, and alterations? SRRs: 121.367(b) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.5.3 Adequate facilities are provided for the proper performance of maintenance, preventive maintenance, and alterations? SRRs: 121.367(b) *Interfaces:* 1.1.2-aw; 1.3.1-aw; 1.3.2-aw; 1.3.3-aw; 1.3.10-aw; 1.3.13-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 5.1.1-aw	☐ Yes ☐ No, Explain
1.5.4 Adequate equipment is provided for the proper performance of maintenance, preventive maintenance, and alterations? SRRs: 121.367(b) *Interfaces:* 1.1.2-aw; 1.3.1-aw; 1.3.2-aw; 1.3.3-aw; 1.3.8-aw; 1.3.14-aw; 1.3.16-aw; 1.3.17-aw; 1.3.18-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 5.1.1-aw; 5.1.4-aw; 5.1.9-aw	☐ Yes ☐ No, Explain
1.5.5 When maintenance, preventive maintenance, or alterations are performed by other persons, each aircraft and its component parts, accessories, and appliances are maintained in an airworthy condition and in accordance with it's CAMP and maintenance manual? SRRs: 121.367(c); D.072(c) *Interfaces:* 1.1.1-aw; 1.1.2-aw; 1.1.3-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.6-aw; 1.3.9-aw; 1.3.10-aw; 1.3.14-aw; 1.3.21-aw; 1.3.22-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.8-aw; 6.2.1-aw	☐ Yes ☐ No, Explain
1.5.6 Each person with whom the certificate holder arranges for the performance of maintenance, preventive maintenance, or alterations has an organization adequate to perform that work? SRRs: 121.365(a)	☐ Yes ☐ No, Explain
1.5.7 Each person with whom the certificate holder arranges for the performance of any required inspections (RII) has an organization adequate to perform that work? SRRs: 121.365(b) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.3-aw; 1.3.4-aw; 1.3.8-aw; 1.3.9-aw; 1.3.10-aw; 1.3.11-aw; 1.3.12-aw; 1.3.13-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.5.8 Each person performing required inspections for the certificate holder, in addition to other maintenance, preventive maintenance or alterations, has organized the performance of those functions so as to separate the required inspection functions from the other maintenance functions? SRRs: 121.365(c)	☐ Yes ☐ No, Explain
1.5.9 Each person performing required inspections is appropriately certificated, properly trained, qualified, and authorized to do so? SRRs: 121.371(a) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.2-aw	☐ Yes ☐ No, Explain ☐ Not Applicable
1.6 Does the certificate holder's manual include a list of persons with whom it has arranged for the performance of any of its required inspections, other maintenance, preventive maintenance, or alterations, including a general description of that work?	☐ Yes ☐ No, Explain

	SRRs: 121.369(a) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.1-aw	
1.7	Does the certificate holder's manual include instructions and information necessary for personnel to ensure that, when maintenance, preventive maintenance, or alterations are performed by other persons: SRRs: 121.135(a)(1); 121.371(b)	
1.7.1	No person is allowed to perform a required inspection unless, at that time, the person performing that inspection is under the supervision and control of an inspection unit? SRRs: 121.371(b) *Interfaces:* 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain ☐ Not Applicable
1.7.2	No person is allowed to perform a required inspection if they performed the item of work that is required to be inspected? SRRs: 121.371(c) *Interfaces:* 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain ☐ Not Applicable
1.8	Does the certificate holder's manual contain instructions and information necessary for personnel to ensure that each person under contract to perform required inspections maintains a current listing of individuals who have been trained, qualified, and authorized to conduct required inspections? SRRs: 121.135(a)(1); 121.371(d) *Interfaces:* 1.3.2-aw; 1.3.4-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.9	Does the certificate holder's manual contain instructions and information necessary to ensure persons with whom it arranges to perform required inspections have given individuals so authorized written information describing the extent of their responsibilities, authorities, and inspectional limitations? SRRs: 121.135(a)(1); 121.371(d) *Interfaces:* 1.3.2-aw; 1.3.4-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.10	Does the certificate holder's manual include instructions and information necessary to conduct continuing analysis and surveillance of the performance and effectiveness of its inspection program and the program covering other maintenance, preventive maintenance, and alterations when those programs are outsourced? SRRs: 121.135(a)(1); 121.373(a) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.2.4-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.6-aw; 1.3.8-aw; 1.3.9-aw; 1.3.10-aw; 1.3.11-aw; 1.3.14-aw; 1.3.15-aw; 1.3.20-aw; 1.3.21-aw; 1.3.22-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 5.1.8-aw; 5.1.9-aw; 6.2.1-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.11	Does the certificate holder's manual include instructions and information necessary to ensure any deficiency in its inspection program and the program covering other maintenance, preventive maintenance, and alterations are corrected when those programs are outsourced?	☐ Yes ☐ No, Explain

SRRs: 121.135(a)(1); 121.373(a) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.2.5-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.6-aw; 1.3.8-aw; 1.3.9-aw; 1.3.10-aw; 1.3.11-aw; 1.3.14-aw; 1.3.15-aw; 1.3.20-aw; 1.3.21-aw; 1.3.22-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 5.1.8-aw; 5.1.9-aw; 6.2.1-aw; 7.1.1-aw; 7.1.2-aw	
1.12 Does the certificate holder's manual require maintenance provider's personnel to be trained in a manner equivalent to the requirements of the certificate holder's manual? SRRs: 121.135(a)(1); 121.375 *Related Design JTIs:* 1. Check that the certificate holder's manual system contains instructions and procedures to ensure that persons performing maintenance or preventive maintenance functions for it have a training program which ensures that each person (including inspection personnel) who determines the adequacy of work done is fully informed about techniques specific to that work.. *Sources:* 121.375; 121.135(b)(16) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-aw; 2.1.2-aw; 2.1.3-aw; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 7.1.1-aw; 7.1.2-aw 2. Check that the certificate holder's manual system contains instructions and procedures to ensure that persons performing maintenance or preventive maintenance functions for it have a training program which ensures that each person (including inspection personnel) who determines the adequacy of work done is fully informed about new equipment in use. *Sources:* 121.375; 121.135(b)(16) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-aw; 2.1.2-aw; 2.1.3-aw; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 7.1.1-aw; 7.1.2-aw 3. Check that the certificate holder's manual system contains instructions and procedures to ensure that persons performing maintenance or preventive maintenance functions for it have a training program which ensures that each person (including inspection personnel) who determines the adequacy of work done is competent to perform their duties. *Sources:* 121.375; 121.135(b)(16) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-aw; 2.1.2-aw; 2.1.3-aw; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 5.1.1-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.13 Does the certificate holder's manual contain instructions and information to ensure its maintenance providers follow the duty time requirements of 14 CFR part 121, section 121.377? SRRs: 121.135(a)(1); 121.377 *Related Design JTIs:* 1. Check that the certificate holder's manual system includes instructions and procedures to ensure that persons (within the United States) performing maintenance or preventive maintenance functions for it shall relieve each person performing maintenance or preventive maintenance from duty for a period of at least 24 consecutive hours during any seven consecutive days, or the equivalent thereof within any one calendar month. *Sources:* 121.377; 121.135(b)(16) *Interfaces:* 1.3.1-aw; 1.3.2-aw; 1.3.14-aw; 2.1.1-aw; 2.1.2-aw; 2.1.3-aw; 2.1.4-aw; 4.2.1-aw; 6.2.1-aw	☐ Yes ☐ No, Explain

1.14 Does the certificate holder's manual contain instructions and information necessary to ensure that its maintenance provider's personnel who are directly in charge of maintenance, preventive maintenance, or alterations, and those persons performing required inspections, must hold an appropriate airman certificate (except for maintenance, preventive maintenance, alterations, and required inspections performed by a certificated repair station that is located outside the United States)? SRRs: 121.135(a)(1); 121.378(a); 121.378(b) *Interfaces:* 1.1.1-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.6-aw; 1.3.9-aw; 1.3.11-aw; 1.3.13-aw; 1.3.14-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw; 7.1.1-aw; 7.1.2-aw	☐ Yes ☐ No, Explain
1.15 Does the certificate holder's CAMP and maintenance manual contain procedures for personnel to make arrangements with other persons to perform maintenance, preventive maintenance, and alterations? SRRs: 121.135(a)(1); 121.379(a) *Interfaces:* 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.9-aw; 1.3.11-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.2.2-aw	☐ Yes ☐ No, Explain
1.16 Does the certificate holder's manual contain instructions and information necessary for personnel to ensure that each person under contract to perform maintenance, preventive maintenance, and alterations: SRRs: 121.135(a)(1); 121.379(a) *Interfaces:* 1.1.1-aw; 1.1.2-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.4-aw; 1.3.5-aw; 1.3.6-aw; 1.3.9-aw; 1.3.10-aw; 1.3.14-aw; 2.1.1-op; 2.1.2-aw; 2.1.3-op; 2.1.4-aw; 4.1.1-aw; 4.1.2-aw; 4.2.1-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw	
1.16.1 Follows its CAMP and maintenance manual when performing maintenance, preventive maintenance, and alterations on its airplanes including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof? SRRs: 121.379(a); 121.369(b)	☐ Yes ☐ No, Explain
1.16.2 Follows the method of performing routine and nonroutine maintenance (other than required inspections), preventive maintenance, and alterations? SRRs: 121.369(b)(1)	☐ Yes ☐ No, Explain
1.16.3 Follows the method of performing required inspections as provided in the CAMP? SRRs: 121.369(b)(3)	☐ Yes ☐ No, Explain
1.16.4 Follows the procedures for the re-inspection of work performed pursuant to previous required inspection findings ("buy-back procedures")? SRRs: 121.369(b)(4)	☐ Yes ☐ No, Explain
1.16.5 Follows the procedures, standards, and limits necessary for required inspections? SRRs: 121.369(b)(5)	☐ Yes ☐ No, Explain
1.16.6 Follows the procedures, standards, and limits necessary for acceptance or rejection of the items required to be inspected? SRRs: 121.369(b)(5)	☐ Yes ☐ No, Explain
1.16.7 Follows the procedures, standards, and limits necessary for periodic inspection and calibration of precision tools, measuring devices, and test equipment? SRRs: 121.369(b)(5)	☐ Yes ☐ No, Explain
1.16.8 Follows the procedures to ensure that all required inspections are performed? SRRs: 121.369(b)(6)	☐ Yes ☐ No, Explain
1.16.9 Follows the instructions to prevent any person who performs any item of work from performing any required inspection of that work? SRRs: 121.369(b)(7)	☐ Yes ☐ No, Explain

1.16.10 Follows the instructions and procedures to prevent any decision of an inspector, regarding any required inspection from being countermanded by persons other than supervisory personnel of the inspection unit, or a person with the proper overall responsibility for management of RII and maintenance functions? SRRs: 121.369(b)(8)	☐ Yes ☐ No, Explain
1.16.11 Follows the procedures that ensure that required inspections, other maintenance, preventive maintenance, and alterations that are not completed as a result of shift changes or similar work interruptions are properly completed before the aircraft is released to service? SRRs: 121.369(b)(9)	☐ Yes ☐ No, Explain
1.17 Does the certificate holder's manual contain procedures to ensure that the maintenance recording requirements of 14 CFR part 121, section 121.380 are met when maintenance, preventive maintenance, or alterations are outsourced? SRRs: 121.380	☐ Yes ☐ No, Explain
1.18 Does the certificate holder's manual contain procedures to ensure that the reporting requirements of 14 CFR part 121, sections 121.703 and 121.705 are met when maintenance, preventive maintenance or alterations are outsourced? SRRs: 121.705; 121.703	☐ Yes ☐ No, Explain
1.19 Does the certificate holder's manual contain procedures to ensure that maintenance provider's personnel who perform aircraft maintenance or preventive maintenance are tested in accordance with 14 CFR part 121, Appendix I, Drug Testing Program and Appendix J, Alcohol Misuse Prevention? SRRs: 121.135(a)(1); 121.457(b)	☐ Yes ☐ No, Explain
1.20 Does the certificate holder's manual contain procedures that ensure that all substantial maintenance performed by the organizations listed in Table 1 of the D091 Operations Specifications is performed without deviation and in accordance with the certificate holder's CAMP? SRRs: 121.135(a)(1); 121.379(a); 121.367; D.091(a)	☐ Yes ☐ No, Explain
1.21 Does the certificate holder's manual contain instructions and information necessary for personnel to ensure that substantial maintenance providers listed in operations specifications D091: SRRs: 121.135(a)(1); D.091(b)	
1.21.1 Have an adequate organizational structure and provide competent, appropriately trained, qualified personnel, as well as appropriate and adequate facilities and equipment for the proper performance of substantial maintenance in accordance with the certificate holder's CAMP? SRRs: D.091(b)	☐ Yes ☐ No, Explain
1.21.2 Require that each person who prepares an airworthiness release in accordance with 14 CFR part 121, section 121.709, is properly authorized? SRRs: D.091(c) *Related Design JTIs:*	☐ Yes ☐ No, Explain

1. Check that the certificate holder's manual system has instructions and procedures to ensure that it does not operate an aircraft after maintenance, preventive maintenance or alterations are performed, unless the certificate holder, or the person with whom it arranges for the performance of the maintenance, preventive maintenance, or alterations, prepares or causes to be prepared an airworthiness release or an appropriate entry in the aircraft log. *Sources:* 121.709(a); 121.135(b)(16) *Interfaces:* 1.1.1-aw; 1.1.2-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.5-aw; 1.3.9-aw; 1.3.13-aw; 1.3.14-aw; 4.1.2-aw; 4.2.1-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw 2. Check that the certificate holder's manual system has instructions and procedures to ensure an airworthiness release, or an appropriate entry in the aircraft log, required by Part 121.709(a) is prepared in accordance with procedures set forth in the certificate holder's manual, regardless of who prepares the release or entry. *Sources:* 121.709(b)(1); 121.135(b)(16) *Interfaces:* 1.1.1-aw; 1.1.2-aw; 1.2.1-aw; 1.2.2-aw; 1.2.3-aw; 1.3.1-aw; 1.3.2-aw; 1.3.5-aw; 1.3.9-aw; 1.3.13-aw; 1.3.14-aw; 4.1.2-aw; 4.2.1-aw; 4.4.1-aw; 4.4.2-aw; 4.4.3-aw; 4.4.4-aw	
1.21.3 Employ persons that determine the adequacy of work performed in accordance with the certificate holder's CAMP, are fully informed, appropriately trained about procedures, techniques, and the use of existing and new equipment, and are competent to perform their duties? SRRs: D.091(e)	☐ Yes ☐ No, Explain
1.22 Does the certificate holder's manual contain procedures that would ensure that all arrangements, particularly those arrangements with foreign organizations, are not contrary to Operations Specifications, paragraph D091, the certificate holder's CAMP, and 14 CFR? SRRs: D.091(g)	☐ Yes ☐ No, Explain
1.23 Does the certificate holder's manual include a system that: SRRs: 121.135(a)(1); D.091(d)	
1.23.1 Detects and identifies, as well as provides timely corrective actions for, all deficiencies in those portions of its CAMP, including recordkeeping systems that are carried out by the organizations listed in Table 1 of Operations Specifications, paragraph D091? SRRs: D.091(d)	☐ Yes ☐ No, Explain
1.23.2 Continually tracks and evaluates the quality of the substantial maintenance work accomplished by the substantial maintenance provider? SRRs: D.091(f)	☐ Yes ☐ No, Explain
1.23.3 Includes provisions for timely corrective actions in the event the quality of work performed by its substantial maintenance provider's becomes unsatisfactory? SRRs: D.091(f)	☐ Yes ☐ No, Explain
1.24 Does the certificate holder's manual contain the required references to, or excerpts from, Operations Specifications, paragraph D091? SRRs: 119.43(b)	☐ Yes ☐ No, Explain
1.25 If the certificate holder's manual includes excerpts from its operations specifications, are the excerpts clearly identified as part of the operations specifications? SRRs: 119.43(b)(1)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.26 Does the certificate holder's manual require compliance with Operations Specifications, paragraph D091? SRRs: 119.43(b)(2)	☐ Yes ☐ No, Explain

1.27	Does the certificate holder's manual contain a method of for keeping all persons engaged in its operations informed of the provisions of Operations Specifications, paragraph D091? SRRs: 119.43(c)	☐ Yes ☐ No, Explain
1.28	Does the certificate holder's manual contain procedures for determining the qualifications of a substantial maintenance provider that comply with the guidance contained in FAA order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapter 69?	☐ Yes ☐ No, Explain

SAI SECTION 1 - PROCEDURES ATTRIBUTE -Drop Down Menu
1. No procedures, policy, instructions or information specified.
2. Procedures or instructions and information do not identify (who, what, when, where, how).
3. Procedures, policy or instructions and information do not comply with CFR.
4. Procedures, policy or instructions and information do not comply with FAA policy and guidance.
5. Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).
6. Procedures, policy or instructions and information unclear or incomplete.
7. Documentation quality (e.g., unreadable or illegible).
8. Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9. Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10. Resource requirements incomplete (personnel, facilities, equipment, technical data).
11. Other.

SAI SECTION 2 - CONTROLS ATTRIBUTE
Objective: Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the DCT are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures, or instructions and information will be followed. Controls may be in the form of administrative controls, which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to questions regarding who, what, when, where and how. Controls may also be in the form of engineered controls, such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

Tasks		
	To meet this objective, the inspector must accomplish the following tasks:	
1	Review the control questions below.	
2	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the controls that it has documented.	
Questions		
	To meet this objective, the inspector must answer the following questions:	
2.	Are the following controls built into the Outsource Organization process:	
2.1	Is there a control in place to ensure that the certificate holder's Continuing Analysis and Surveillance System would detect and correct deficiencies in programs carried out by the outsource organization?	☐ Yes ☐ No, Explain
2.2	Is there a control in place to ensure that the certificate holder's aircraft, including airframes, engines, propellers, appliances, emergency equipment or parts thereof, released to service by the maintenance provider, are maintained in an airworthy condition for operation under 14 CFR 121?	☐ Yes ☐ No, Explain
2.3	Is there a control in place to ensure that competent personnel are provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
2.4	Is there a control in place to ensure that adequate facilities are provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
2.5	Is there a control in place to ensure that adequate equipment is provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft, including airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
2.6	Is there a control in place to ensure that the maintenance provider was appropriately rated/authorized for the maintenance, preventive maintenance, or alterations it performed on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
2.7	Is there a control in place to ensure that current technical and administrative material for the proper performance of maintenance, preventive maintenance, and alterations of the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof, is accessible to outsource provider personnel while performing their assigned duties?	☐ Yes ☐ No, Explain
2.8	Does the certificate holder have a documented method for assessing the impact of any changes made to the controls in the Outsource Organization process?	☐ Yes ☐ No, Explain

SAI SECTION 2 - CONTROLS ATTRIBUTE -Drop Down Menu
1. No controls specified.
2. Documentation for the controls do not identify (who, what, when, where, how).
3. Controls incomplete.

4. Controls could be circumvented.
5. Controls could be unenforceable.
6. Resource requirements incomplete (personnel, facilities, equipment, technical data).
7. Other.

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE

Objective: Process measurements are used by the certificate holder to measure and assess its processes, to identify and correct problems or potential problems, and to make improvements to the processes. The questions in this section of the DCT are designed to assist the inspector in determining if the certificate holder measures or assesses information to identify, analyze, and document potential problems with the process. Process measurements are a certificate holder's internal evaluation or auditing of the most important policies, procedures, or instructions and information associated with an element.

To prevent the duplication of work, process measurements are most commonly addressed through a combination of auditing features contained in both the certificate holder's safety program/internal evaluation program (for operations and cabin safety-related issues) and the auditing function of the Continuous Analysis and Surveillance System (for airworthiness or maintenance/inspection-related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and Surveillance System audit forms or checklists to include the specific process measurements for each element.

Tasks		
	To meet this objective, the inspector must accomplish the following tasks:	
1	Review the process measurement questions below.	
2	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the process measurements that it has documented.	
Questions		
	To meet this objective, the inspector must answer the following questions:	
3.	Does the certificate holder's Outsource Organization process include the following process measurements:	
3.1	Process measurements that would reveal if the certificate holder's Continuing Analysis and Surveillance System failed to detect and correct deficiencies in programs carried out by the outsource organization?	☐ Yes ☐ No, Explain
3.2	Process measurements that would reveal if the certificate holder's aircraft including airframes, engines, propellers, appliances, emergency equipment, or parts thereof, were released to service by the maintenance provider in other than an airworthy condition for operation under 14 CFR 121?	☐ Yes ☐ No, Explain
3.3	Process measurements that would reveal if competent personnel were not provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
3.4	Process measurements that would reveal if adequate facilities were not provided by the maintenance provider for the proper performance of maintenance, preventive	☐ Yes

	maintenance, and alterations on the Certificate Holder's airframes, engines, propellers, appliances, emergency equipment or parts there of?	☐ No, Explain
3.5	Process measurements that would reveal if adequate equipment was not provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft including airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
3.6	Process measurements that would reveal if the maintenance provider was not appropriately rated/authorized for the maintenance, preventive maintenance, or alterations it performed on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
3.7	Process measurements that would reveal if current technical and administrative material for the proper performance of maintenance, preventive maintenance, and alterations of the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof, was not accessible to outsource provider personnel while performing their assigned duties?	☐ Yes ☐ No, Explain
3.8	Does the certificate holder document its process measurement methods and results?	☐ Yes ☐ No, Explain
3.9	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Outsource Organization process?	☐ Yes ☐ No, Explain

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE -Drop Down Menu
1. No process measurements specified.
2. Documentation for the process measurements does not identify (who, what, when, where, how).
3. Inability to identify negative findings.
4. No provisions for implementing corrective actions.
5. Ineffective follow-up to determine effectiveness of corrective actions.
6. Resources requirements (personnel, facilities, equipment, technical data).
7. Other.

SAI SECTION 4 - INTERFACES ATTRIBUTE
Objective: Interfaces are used by the certificate holder to identify and manage the interactions between processes. The questions in this section of the DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures, or instructions and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures, or instructions and information that are interrelated and located in different manuals within the certificate holder's manual system must be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the

certificate holder's manual system.		
Tasks		
To meet this objective, the inspector must accomplish the following tasks:		
1	Review the interfaces associated with the Outsource Organization process that have been identified along with the individual questions in the Section 1, Procedures, of this DCT.	
2	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the interfaces that it has documented.	
Questions		
To meet this objective, the inspector must answer the following questions: Note: The design job task items (JTIs) displayed with the questions in Section 1, Procedures of this DCT, identify the potential interfaces (by element number) for this element.		
4.	Does the certificate holder's manual:	
4.1	Properly address the interfaces that are identified along with the questions in Section 1, Procedures of this DCT.	☐ Yes ☐ No, Explain
4.2	Document a method for assessing the impact of any changes to the associated interfaces within the Outsource Organization process?	☐ Yes ☐ No, Explain
4.3	List additional interfaces identified during the accomplishment of this SAI.	Free form text:

SAI SECTION 4 - INTERFACES ATTRIBUTE -Drop Down Menu
1. No interfaces specified.
2. The following interfaces not identified within the Certificate Holder's manual system:
3. Interfaces listed are inaccurate.
4. Specific location of interfaces not identified within the manual system.
5. Other

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE	
Objective: The questions in this section of the DCT address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)	
Tasks	
To meet this objective, the inspector must accomplish the following tasks:	
1	Identify the person who has overall responsibility for the Outsource Organization process.

2	Identify the person who has overall authority for the Outsource Organization process.	
3	Review the duties and responsibilities of the person(s), documented in the certificate holder's manual.	
4	Review the appropriate organizational chart.	
Questions		
	To meet this objective, the inspector must answer the following questions:	
5.	Are the following aspects of the Management Responsibility and Authority Attribute addressed in the Outsource Organization process:	
5.1	Does the certificate holder's manual clearly identify who is responsible for the quality of the Outsource Organization process?	☐ Yes ☐ No, Explain Name/Title:
5.2	Does the certificate holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions and information for the Outsource Organization process?	☐ Yes ☐ No, Explain Name/Title:
5.3	Does the certificate holder's manual include the duties and responsibilities of those who manage the work required by the Outsource Organization process? SRRs: 121.135(b)(2)	☐ Yes ☐ No, Explain
5.4	Does the certificate holder's manual include instructions and information for those who manage the work required by the Outsource Organization process? SRRs: 121.135(a)(1)	☐ Yes ☐ No, Explain
5.5	Does the certificate holder's manual clearly and completely document the authority for this position?	☐ Yes ☐ No, Explain
5.6	Does the certificate holder's manual clearly and completely document its qualification standards for the person having responsibility for the Outsource Organization process?	☐ Yes ☐ No, Explain
5.7	Does the certificate holder's manual clearly and completely document its qualification standards for the person having authority to establish and modify the certificate holder's policies, procedures, instructions and information for the Outsource Organization process?	☐ Yes ☐ No, Explain
5.8	Does the certificate holder's manual clearly and completely document the procedures for delegation of authority for the Outsource Organization process?	☐ Yes ☐ No, Explain

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE -Drop Down Menu
1. Not documented.
2. Documentation unclear.
3. Documentation incomplete.
4. Other.

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Figure 4-3-2. General Instructions for Completion of Safety Attribute Inspection (SAI) 1.x Data Collection Tools

The following general instructions provide explanations and guidance for each section of the Version 1.x Safety Attribute Inspection (SAI) Data Collection Tools (DCT). SAIs are accomplished by a team of inspectors or a single inspector who must be listed as the team coordinator assigned to an Air Transportation Oversight System (ATOS) Certificate Management Team (CMT) or a Certification Project Team. Principal inspectors (PI) should consider the nature and complexity of the element to be inspected, and whether or not the single-inspector method is appropriate in each case. SAI teams should always contain a sufficient number and knowledge base of inspectors to accurately inspect the element. The inspector(s) designated to complete the SAI should be appropriately trained and knowledgeable on subjects related to the SAIs. Supervisory concurrence must be obtained to accomplish an SAI using a single inspector. Complex or critical SAIs should not be completed using the single-inspector method or the same inspector whenever possible.

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder responsibility)
Each element should be considered a process that is performed by a certificate holder. The purpose statement defines the intent of the element and the scope of the certificate holder's responsibility. A certificate holder's process is made up of a series of policies and procedures, which should incorporate the safety attributes contained in each SAI.

Objective (FAA oversight responsibility)
This defines the scope of the inspection in general terms.

Specific Instructions
Some DCTs may contain specific instructions for additional training, experience, or qualifications that may be helpful in determining inspector assignments. Specific instructions may also include additional references, background information, or manuals that should be reviewed, as well as suggestions for specific types of activities and/or reporting instructions.

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs)
An SRR is a regulation from Title 14 of the Code of Federal Regulations (14 CFR) that has been refined to its most specific level. SRRs are included with each SAI as a reference for the inspector. The SRRs were used during the development of the SAI DCTs to help define the function of the element and to develop many of the procedures attribute questions. Some of these regulations pertain to certification and some pertain to surveillance.

Questions that are based on regulatory requirements have an SRR appended to them. Therefore, answering "No" to such a question may require an enforcement investigation.

Questions that do not have an SRR appended to them are not regulatory in nature, but are based on system safety principles. A "No" answer to this type of question, while not a violation, might be an indication of an increased level of risk that may require additional action on the part of the CMT.

Related CFRs and FAA Policy/Guidance

Reference to "Related CFRs" means 14 CFR parts, other than those categorized as SRRs. Related CFRs and FAA policy/guidance are included for background information that is necessary to accomplish the inspection. The inspector should also review the related elements that are included in the associated Element Performance Inspection (EPI). The purpose of this review is to make the inspector aware of any other elements that may interface with this SAI to ensure that related procedures do not conflict.

At the time of publication, the guidance material was considered current. If the guidance has been updated since the DCT was published, the inspector should read the latest version even if it is not specifically mentioned in the SAI. Subsequent revisions to SAI DCTs will incorporate updates to this guidance material. However, revisions may not be generated based solely on outdated guidance. Even if it is outdated or superseded, the listed guidance may be useful as a starting point in researching current guidance.

SAFETY ATTRIBUTE SECTIONS

Objective

This defines the FAA's responsibility and the scope of the inspection in general terms. Specific objectives are contained in each section of the SAI, as follows:

Section 1 – Procedures Attribute

To determine if the certificate holder has documented or prescribed methods for accomplishing the process.

Section 2 – Control Attribute

To determine if checks and restraints are designed into the process to ensure a desired result is achieved.

Section 3 – Process Measurement Attribute

To determine if the certificate holder measures and assesses the process to identify and correct problems or potential problems.

Section 4 – Interfaces Attribute

To determine if the air carrier identifies and manages the interactions between the process and the other element processes within the certificate holder's organization.

Section 5 – Management Responsibility and Authority Attribute

To determine if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and

has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility).

Tasks

Each attribute section of the DCT contains the statement, "*To meet this objective, the inspector must accomplish the following task(s).*" Each task is made up of various activities. The following are some of the tasks that may be listed on an SAI:

1. Review the information listed in the Supplemental Information section of this DCT.

A list of the SRRs, related CFRs, and FAA policy/guidance documents that are pertinent to the questions of the DCT for a given element are provided in the Supplemental Information section of the SAI. Regulatory and FAA policy/guidance references will also appear at the question level. The inspector reviews the related CFRs and FAA policy and guidance documents included with each SAI.

2. Review the duties for management and other personnel identified by the certificate holder who accomplish the (element name) process.

3. Review the certificate holder's manual to ensure that it contains policies, procedures, instructions, and information necessary for the (element name) process.

The inspector should review and gain an understanding of the certificate holder's policies, procedures, instructions, and information for the element he/she is inspecting in order to plan their inspection activities. This will usually involve reviewing sections of the appropriate operations specifications (OpSpecs), training programs, or other guidance, as well as the manuals related to the process.

4. Review the interfaces associated with the (element name) process that have been identified along with the individual questions in the Procedures section (1) of this DCT.

Some questions in the Procedures section (1) contain references to "Interfaces" in the Related Design job task items (JTI). The inspector reviews those references to identify the interfaces in the certificate holder's manual.

5. Identify the person who has overall responsibility for the (element name) process.

The inspector must understand the certificate holder's system sufficiently to know who is responsible for the quality of each process.

6. Identify the person who has overall authority for the (element name) process.

The inspector must understand the certificate holder's system sufficiently to know who has the authority to establish or modify each process.

7. Review the duties and responsibilities of the person(s) documented in the certificate holder's manual.

The inspector must understand the certificate holder's system sufficiently to know the duties and responsibilities of individuals assigned the responsibility for each process or authority to change each process**.**

8. Review the appropriate organizational chart.

The inspector must understand the certificate holder's organization sufficiently to identify who has the authority and responsibility for certain processes. In any organization there is not always one individual who is in charge. Authority and responsibility are often disbursed. A person can be an individual, a department, a committee, or a position.

Questions

Each SAI lists a series of questions for the SAI team to answer based on its observations during the various activities. Questions on each activity report are answered in response to what was observed on that single activity. The DCTs are not designed to be a checklist of questions that are asked directly of the certificate holder's personnel. It is inappropriate to give the certificate holder's personnel a copy of the DCT and ask them to fill it out.

Job Task Items

JTIs are included with questions for inspector reference only. JTIs aid the inspector in determining if a certificate holder's written policies, procedures, instructions, and information are adequate. The inspector *is not expected* to respond to each JTI individually. The JTIs listed below each question are there to aid inspectors in answering the question. If a question appears to be nonspecific (e.g., "Does the certificate holder's Distribution (Manuals) process comply with the guidance contained in FAA Order 8300?"), the JTIs listed below that question *identify* the specific requirements for *manual distribution* contained in Order 8300.10, current edition.

Each SAI attribute section includes the statement, "*To meet this objective, the inspector must answer the following questions."* The following paragraphs describe some of the typical questions in each section of the DCT.

Section 1 – Procedures Attribute

To respond to the questions in this section, the SAI team must gain a thorough understanding of the certificate holder's policies, procedures, instructions and/or information for this specific process. The purpose is to determine the method used by the certificate holder to accomplish the process associated with the element. The team is asked to *determine if written procedures exist*, if the procedures contain sufficient detail, and if they are in compliance with the CFRs. A reference to the section of the manual where these procedures are located provides helpful information for future SAI and EPI inspections, and may be entered into the text box that becomes available when a "Yes" response is entered into the ATOS Data Repository. A list of procedures for this process is included in this section. Many of these listed procedures have SRRs for this process, although the certificate holder may have some latitude in implementing others. For this reason, a response of "No" to one of these questions doesn't necessarily mean that the company is not complying with a regulation or that any action is required.

Section 2 – Control Attribute

Controls are checks and restraints that must be built into the certificate holder's processes to help ensure that the desired result is continually achieved. While most controls are not regulatory, they are an important safety attribute with desirable features that help to reduce risk. Each SAI lists a series of controls. Some common types of controls are flags, data

system backups, authorized signatures, separation of duties, or a final review. It is important to note that certificate holders must be able to show the effectiveness of their controls. Few of these controls have their basis in SRRs. For this reason, a response of "No" to one of these questions doesn't necessarily mean that the company is not complying with a regulation or that any action is required.

Section 3 – Process Measurement Attribute
The purpose of this attribute is to ensure that the certificate holder uses an internal evaluation function to detect, identify, analyze, and document potential causes of nonconformity within their processes. Each SAI lists process measurements that are specific to that element. Process measurements are designed to determine if the certificate holder's policies, procedures, and controls are achieving the desired results or the purpose for that element. In most cases, process measures are nonregulatory. For this reason, a response of "No" to one of these questions, while not a violation, would be an indication of a risk that may require additional action on the part of the CMT.

Section 4 – Interfaces Attribute
This section focuses on the interactions between the process under inspection and other processes within the certificate holder's organization. Each SAI DCT lists some of the interfaces that are specific to that element. There may be additional interfaces that the inspection team identifies that should be listed on the DCT. The first question asks if the certificate holder has recognized and addressed the interfaces identified in Section 1, Procedures Attribute. The second question asks if the certificate holder's manual documents a method for assessing the impact of any changes to the associated interfaces within the (element name). The third question is really not a question but a subsequent location for SAI team members to identify additional interfaces.

> **NOTE: In the Procedures section (1), some questions have references to "Interfaces" in the Related Design JTIs. The inspector will need to refer to those questions, tagged with interfaces, to answer the question.**

Section 5 – Management Responsibility and Authority
This section asks a series of questions about a clearly identifiable person who is responsible for the quality of the process or who has authority to establish and modify the process. The first two questions require that a name be entered. In any organization there is not always one individual who is in charge. Authority and responsibility are often disbursed. A person can be an individual, a department, a committee, or a position (such as pilot-in-command). The intent is to identify the highest-level person (at the appropriate level within the organization) who is responsible or has the authority for that particular element of the certificate holder's system. The remaining questions for this section ask if the duties and responsibilities and qualification standards are clearly documented.

Master SAI Record
SAIs are completed by a team of inspectors or a single inspector who must be listed as the team coordinator. Complex or critical SAIs should not be completed using the single-inspector method or the same inspector whenever possible. During SAIs team members

may be responsible for a subsystem, or portion of a subsystem, under the leadership of a TC. This structure allows the CMT to assess the entire subsystem and obtain a big picture look at how the certificate holder operates. Inspectors may be tasked to respond only to certain elements within a system, to certain attribute sections within a DCT, or even to certain questions. It is necessary to only answer each SAI question once before the SAI TC can save the master SAI to final. The SAI team will coordinate its individual activities as necessary to accurately answer all the questions on the master SAI. When completing an individual activity for an SAI, the ASI will answer and enter responses only to those questions that can be answered directly from the activity being reported. As a general rule, most SAIs should be completed within 120 days. This time frame begins on the date when the first activity is opened and closes when the last activity is saved to final and the record containing all associated activities is saved to the master record by the inspector. This time frame does not include the data evaluation process.

SAI Activities

SAIs involve multiple activities over multiple dates (a sufficient number of activities to answer all the questions and perform a thorough, quality inspection). They are typically performed at the certificate holder's general offices, main operations base, or main maintenance base. A general rule of thumb is that any time that the common data field information changes (date, location, etc.), it is a new activity and should be recorded as a new report, even if only a single question can be answered. Since an activity is a snapshot of the operator's system at that moment, most activities will probably be opened and closed in a single day.

SAI Common Data Fields

Enter all the information you have available from each activity. At a minimum, every inspection activity should include Activity Start Date, Activity End Date, and Departure Point/Location. Additional guidance for each data field is found in the ATOS Automation User Guide.

Response Definitions

Since the SAI questions are answered with either a "Yes" or "No" and for some SAI questions, a third answer option of "N/A," it is important to understand the implications of those answers.

- A **"Yes"** answer means that the specific question being asked, for the particular SAI activity being observed, complies with applicable SRRs and any FAA guidance appropriate to that element. Further, a "Yes" indicates that the observed procedures incorporate any system safety principles approved/accepted for the certificate holder's in the applicable safety attribute.

  Note: A **"Yes"** answer always indicates a positive response. Great care should be taken when determining if the response is positive. If the inspector records a positive answer using a qualifier (e.g., "Yes, but…"), this may indicate that the answer should actually be a "No." In that case the inspector should re-evaluate his/her answer.

- A **"No"** answer means that on the specific question being asked, for the particular SAI activity being observed, the operator either does not comply with applicable SRRs and FAA guidance for that element or that the certificate holder's procedures do not incorporate system safety principles within the attribute.

  A **"No"** answer can also mean inadequate inclusion of the safety attributes in the area being evaluated or that the certificate holder's approved/accepted procedures are inadequate.

  Observed noncompliance with regulations should necessitate coordination with the PI and may result in an enforcement investigation. It should be noted that an *enforcement investigation would not be required* when a "No" response identifies weaknesses in a system that has literal compliance with the regulations.

  NOTE: Significant issues or items of immediate concern, as determined by the inspector, will be verbally conveyed to the PI promptly. That should be followed up with either an electronic message or memorandum.

  Drop-Down Menus
  A "No" response requires the inspector to select one or more potential problem areas from a drop-down menu. The inspector must include an explanation in the "No" comments box for each area selected. If the choices available do not adequately describe your observation, select "Other" and provide an explanation in the comment block.

- An **"N/A"** (not applicable) answer means that a particular question does not apply to the certificate holder being evaluated because of the type of operation, type of aircraft, area of operation, etc. An "N/A" answer does not mean "not observed" or that not enough time was available to answer the question. If a question applies to an operator, then an observation should be conducted to appropriately answer the question.

Comment Fields

All comments should be written in clear, concise language, using sentence case and proper spelling. Explanations should be complete and descriptive, with as much information as necessary for other CMT members to understand the comments without requiring further information from the inspector. Comments submitted in the ATOS automated tools should include who, what, where, when, why, and how. References should be entered when appropriate.

ASIs should not enter the word "None" in any comment field. If a particular comment field does not apply, it should be left blank. Comment fields should be used to report observed facts, not inspector opinion. Comments that do not directly relate to the question being answered are inappropriate. An important function of the data evaluation program

manager (DEPM) is the review of comment fields to ensure that quality data enters the ATOS database. The comments entered into the ATOS Data Repository are expected to conform to the guidance contained in the ATOS Data Quality Guidelines, Figure 5-3. *The DEPM will return any records for correction that do not meet these guidelines.*

SAI Team Concept

SAIs are completed by a team of inspectors or a single inspector who must be listed as the team coordinator. PIs should consider the nature and complexity of the element to be inspected, and whether or not the single-inspector method is appropriate in each case. SAI teams should always contain a sufficient number and knowledge base of inspectors to accurately inspect the element. The inspector(s) designated to complete the SAI should be appropriately trained and knowledgeable on subjects related to the SAIs. Supervisory concurrence must be obtained to accomplish an SAI using a single inspector. Complex or critical SAIs should not be completed using the single-inspector method or the same inspector whenever possible. The TC should distribute elements, sections, attributes, or questions to the team member with the experience most closely related to the area being evaluated.

An SAI team evaluates an ATOS subsystem or a portion of a subsystem. Each team member is responsible for completing certain elements within a system, or a particular attribute section, or possibly certain questions within an attribute section. After performing these inspection activities, each SAI team member is responsible for reporting his or her own responses into ATOS automation. Although communication among team members is essential, there is no need to share answers among team members for the purpose of having each team member answer every question. This is an undesirable action resulting in duplication. It is the function of the SAI TC to ensure that inspection activities are not repetitive or redundant, and that all inspection activities are completed with all questions answered accurately on the SAI. The purpose of the SAI team concept is to allow the distribution of inspection activities among the SAI team so that the required data is collected in a timely manner and only once.

There may be instances when a SAI team or a group of inspectors from a team work together. This is certainly required during the initial planning for the inspection activities. Another team activity that might be appropriate is completing the interfaces attribute and comparing the information between multiple manuals. At the completion of this particular activity, the TC may input all of the responses, or the responses could be divided up between the inspectors for input, but there should not be duplicate entries.

Figure 4-4. Element Performance Inspection (EPI)

Figure 4-4-1, Sample Element Performance Inspection (EPI) 1.x Data Collection Tool

Figure 4-4-2, General Instructions for Completion of Element Performance Inspection (EPI) 1.x Data Collection Tools

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Figure 4-4-1. Sample Element Performance Inspection (EPI) 1.x Data Collection Tool

Element Performance Inspection (EPI) Data Collection Tool 1.3.7 Outsource Organization (AW)

ELEMENT SUMMARY INFORMATION

Purpose of This Element (Certificate Holder's responsibility):

- To ensure when making arrangements with other persons to perform maintenance, preventive maintenance, or alterations of its aircraft, including airframes, aircraft engines, propellers, appliances, emergency equipment, and parts thereof, the performance is in accordance with its continuous airworthiness maintenance program (CAMP), maintenance manual and the regulations of Title 14 of the Code of Federal Regulations (14 CFR).

Objective (FAA oversight responsibility):

- To determine if there were any changes in the personnel identified by the Certificate Holder as having responsibility and/or authority for the Outsource Organization process.
- To determine if the Certificate Holder follows its procedures, controls, process measurements and interfaces for the Outsource Organization process.

Specific Instructions:

- To accomplish this element performance inspection (EPI), the inspector will verify that the certificate holder is able to determine by audit or other means that the observed maintenance provider(s) (outsource organization(s)) met the certificate holder's requirements and performed maintenance in accordance with the certificate holder's maintenance manual and CAMP.

  The inspector will verify that the certificate holder ensures the outsource organization employs appropriately trained, qualified, authorized, and certificated personnel, and maintains the appropriate facilities and equipment for the work being performed. The inspector should review work requests for completeness and perform a spot inspection of the actual work for compliance with the provided data. Additionally, the inspector will verify the certificate holder provides appropriate oversight to all substantial maintenance providers listed in the certificate holder's Operations Specifications, paragraph D091. This EPI outlines the qualification, control, and surveillance methodology and procedures that should be used by certificate holders seeking to qualify outsource organizations who perform substantial maintenance. Certificate holders should also consider the use of similar methodology and procedures, except for the operations specifications listing requirement, for the qualification, control, and surveillance of all other maintenance providers performing any maintenance for the 14 CFR part 121 certificate holder.

  Questions 1.1 and 5 in section 1 are not the same. Question 1.1 is directed at the output, in this case the work being performed. Question 5 is directed at the Outsource Organization process. This is the certificate holder's methodology in selecting maintenance providers.

If the outsource maintenance provider is the holder of a 14 CFR part 145 repair station certificate, the inspector should contact the principal inspector (PI) assigned to the 14 CFR part 145 repair station certificate and advise him or her of the planned inspection. Prior to visiting the repair station the inspector should review Program Tracking and Reporting Subsystem (PTRS) data and any information from the assigned PI's previous inspections of the 14 CFR part 145 repair station that may be available. This information may assist the inspector in planning the their inspection activities. This EPI does not relieve the PI assigned to the repair station of performing any tests or inspections of the 14 CFR part 145 certificate holder. This inspection is to determine if the 14 CFR part 121 requirements are met for the work accomplished by the 14 CFR part 145 repair station for the 14 CFR part 121 certificate holder. After completing the individual activity report for the repair station visit, the inspector should advise the 14 CFR part 145 repair station's PI of any adverse findings, preferably in writing.

Related EPIs:

- 1.2.1 Airworthiness Release / Logbook Entry (AW)
- 1.2.2 Major Repairs and Alterations Records (AW)
- 1.2.3 Maintenance Log / Recording Requirements (AW)
- 1.3.2 Inspection Program (AW)
- 1.3.3 Maintenance Facility / Main Maintenance Base (AW)
- 1.3.4 Required Inspection Items (RII) (AW)
- 1.3.5 MEL / CDL / Deferred Maintenance (AW)
- 1.3.6 AD Management (AW)
- 1.3.8 Control of Calibrated Tools and Test Equipment (AW)
- 1.3.9 Engineering / Major Repairs and Alterations (AW)
- 1.3.10 Parts / Material Control / SUP (AW)
- 1.3.11 Continuous Analysis and Surveillance (CAS) (AW)
- 1.3.15 Reliability Program (AW)
- 1.3.16 Fueling (AW)
- 1.3.18 De-Icing Program (AW)
- 1.3.19 Lower Landing Minimums (LLM) (AW)
- 2.1.1 Manual Currency (AW)
- 2.1.2 Content Consistency Across Manuals (AW)
- 2.1.3 Distribution (Manuals) (AW)
- 2.1.4 Availability (Manuals) (AW)
- 2.1.5 Supplemental Operations Manual Requirements (AW)
- 4.1.1 RII Personnel (AW)
- 4.1.2 Maintenance Certificate Requirements (AW)
- 4.4.1 Recency of Experience (AW)
- 4.4.2 Display of Certificate (AW)
- 4.4.3 Privileges Airframe and Powerplant (AW)
- 4.4.4 Privileges and Limitations for Repairmen (AW)
- 5.1.1 Line Stations (AW)

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
  119.43(b)
  119.43(b)(1)
  119.43(b)(2)
  119.43(c)
  121.135(a)(1)
  121.135(b)(1)
  121.135(b)(2)
  121.135(b)(3)
  121.363(b)
  121.365(a)
  121.365(b)
  121.365(c)
  121.367
  121.367(a)
  121.367(b)
  121.367(c)
  121.369(a)
  121.369(b)
  121.369(b)(1)
  121.369(b)(3)
  121.369(b)(4)
  121.369(b)(5)
  121.369(b)(6)
  121.369(b)(7)
  121.369(b)(8)
  121.369(b)(9)
  121.371(a)
  121.371(b)
  121.371(c)
  121.371(d)
  121.373(a)
  121.375
  121.377
  121.378(a)
  121.378(b)
  121.379(a)
  121.380
  121.457(b)
  121.703
  121.703(g)
  121.705
  121.709(a)
  D.072(c)
  D.091
  D.091(a)

  D.091(b)

D.091(c)
D.091(d)
D.091(e)
D.091(f)
D.091(g)

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
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- FAA Policy/Guidance:
  FAA Order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapter 69

EPI SECTION 1 - PERFORMANCE OBSERVABLES		
Objective: (FAA oversight responsibility): To determine if the certificate holder follows its procedures, controls, process measurements, and interfaces for the Outsource Organization.		
Tasks		
	To meet this objective, the inspector must accomplish the following tasks:	
1	Review information listed in the supplemental information section of this data collection tool (DCT).	
2	Review the polices, procedures, instructions, and information, for the Outsource Organization process contained in the certificate holder's manual.	
3	Review the associated safety attribute inspection (SAI) for this element with emphasis on the controls, process measurements, and interface attribute sections.	
4	Observe the Outsource Organization process to gain an understanding of the procedures, instructions, and information contained in the certificate holder's manual.	
5	Discuss the Outsource Organization process with personnel (other than management) who perform the duties and responsibilities required by the Outsource Organization process.	
6	Prior to conducting inspection activities at 14 CFR part 145 repair stations you should contact and coordinate your activities with the Principal Inspector (PI).	
Questions		
	To meet this objective, the inspector must answer the following questions:	
1.	Determine whether the following performance standards were met:	
1.1	Did the certificate holder's Continuing Analysis and Surveillance System detect and correct deficiencies in programs carried out by the outsource organization?	☐ Yes ☐ No, Explain
1.2	Were aircraft, including airframes, engines, propellers, appliances, emergency equipment, or parts thereof, released to service by the maintenance provider, maintained in an airworthy condition for operation under 14 CFR part 121?	☐ Yes ☐ No, Explain
1.3	Were competent personnel provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof? *Related Performance JTI's:*	☐ Yes ☐ No, Explain

1. Check at the outsource provider, that any person performing a required inspection for the certificate holder is appropriately certificated, properly trained, qualified, and authorized to do so in accordance with the certificate holder's manual. *Sources:* 121.371(a); 121.135(b)(19) 2. Check at the outsource provider, that any person performing a required inspection for the certificate holder is performing that inspection under the supervision and control of an inspection unit in accordance with the certificate holder's manual. *Sources:* 121.371(b); 121.135(b)(19) 3. Check at the outsource provider, that any person performing a required inspection for the certificate holder did not perform the item of work required to be inspected in accordance with the certificate holder's manual. *Sources:* 121.371(c); 121.135(b)(19) 4. Check at the aircraft, for any person performing a required inspection for the certificate holder that that person did not perform the item of work required to be inspected in accordance with the certificate holder's manual. *Sources:* 121.371(c); 121.135(b)(19) 5. Check at the aircraft, for any person performing a required inspection for the certificate holder that that person is on the current list of persons trained, qualified, and authorized to perform required inspections in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 6. Check at the air carrier specified location, for any person performing a required inspection for the certificate holder that that person is on the current list of persons trained, qualified, and authorized to perform required inspections in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 7. Check at the outsource provider, that any person performing a required inspection for the certificate holder has been given written information describing the extent of their responsibilities, authorities and inspectional limitations in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 8. Check at the outsource provider, that any person performing a required inspection for the certificate holder has written information describing the extent of their responsibilities, authorities and inspectional limitations in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 9. Check at the air carrier specified location, that any person performing a required inspection for the certificate holder has been given written information describing the extent of their responsibilities, authorities and inspectional limitations in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 10. Check at the air carrier specified location, that any person performing a required inspection for the certificate holder has written information describing the extent of their responsibilities, authorities and inspectional limitations in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 11. Check at the training center, that a training program provides instructions for persons performing maintenance, preventive maintenance or inspection functions to ensure each person is fully informed about procedures, techniques, new equipment and is competent to perform their duties specific to that work In accordance with the certificate holder's manual. *Sources:* 121.375; 121.135(b)(16) 12. Check at the outsource provider, that persons (within the United States) performing maintenance or preventive maintenance functions for the certificate holder have been	

	relieved from duty for a period of at least 24 consecutive hours within the last seven consecutive days or equivalent within the calendar month. *Sources:* 121.377; 121.135(b)(16) 13. Check at the outsource provider, that any person directly in charge of maintenance, preventive maintenance, or alterations is appropriately certificated in accordance with the certificate holder's manual. *Sources:* 121.378(a); 121.378(b); 121.135(b)(16) 14. Check at the outsource provider, that any person performing required inspections for the certificate holder is appropriately certificated in accordance with the certificate holder's manual. *Sources:* 121.135(b)(16); 121.378(a); 121.378(b) 15. Check at the aircraft, that after maintenance, preventive maintenance, or alterations is performed by an outsource provider, an airworthiness release or appropriate entry in the aircraft log has been prepared prior to the operation of the aircraft in accordance with the certificate holder's manual. *Sources:* 121.709(b)(1); 121.709(a); 121.135(b)(16) 16. Check at the outsource provider, that an adequate organization is provided for the proper performance of maintenance, preventive maintenance, and alterations in accordance with the certificate holder's manual. *Sources:* 121.365(a); 121.135(b)(1)	
1.4	Were adequate facilities provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's airframes, engines, propellers, appliances, emergency equipment, or parts thereof? *Related Performance JTI's:* 1. Check at the outsource provider, that adequate facilities are provided for the proper performance of inspections, maintenance, preventive maintenance, or alterations in accordance with the certificate holder's manual. *Sources:* 121.369(b); 121.135(b)(19); 121.369(b)	☐ Yes ☐ No, Explain
1.5	Was adequate equipment provided by the maintenance provider for the proper performance of maintenance, preventive maintenance, and alterations on the certificate holder's aircraft including airframes, engines, propellers, appliances, emergency equipment, or parts thereof? *Related Performance JTI's:* 1. Check at the outsource provider, that adequate equipment is provided for the proper performance of inspections, maintenance, preventive maintenance, or alterations in accordance with the certificate holder's manual. *Sources:* 121.367(b); 121.135(b)(19); 121.369(b)	☐ Yes ☐ No, Explain
1.6	Was the maintenance provider appropriately rated/authorized for the maintenance, preventive maintenance, or alterations it performed on the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof?	☐ Yes ☐ No, Explain
1.7	Was current technical and administrative material for the proper performance of maintenance, preventive maintenance, and alterations of the certificate holder's aircraft, airframes, engines, propellers, appliances, emergency equipment, or parts thereof, accessible to outsource provider personnel while performing their assigned duties?	☐ Yes ☐ No, Explain
2	Were the certificate holder's policies, procedures, instructions and information, contained in its manual, for the Outsource Organization process followed? *Related Performance JTI's:*	☐ Yes ☐ No, Explain

	1. Check at the outsource provider, that an adequate organization is provided for the proper performance of required inspections in accordance with the certificate holder's manual. *Sources:* 121.365(b); 121.135(b)(1) 2. Check at the outsource provider, that an organizational chart that clearly defines a separation of required inspection functions from other maintenance, preventive maintenance, or alterations below the level of administrative control at which those functions are exercised in accordance with the certificate holder's manual. *Sources:* 121.365(c); 121.365(b) 3. Check at the air carrier specified location, for a list of persons authorized to perform any of its required inspections, maintenance, preventive maintenance, or alterations and a general description of that work in accordance with the certificate holder's manual. *Sources:* 121.369(a) 4. Check at the outsource provider, that a current list of persons trained, qualified, and authorized to perform required inspections for the certificate holder is maintained in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 5. Check at the outsource provider, that persons listed as trained, qualified, and authorized to perform required inspections for the certificate holder are identified by name, occupational title, and inspections they are authorized to perform in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(a)(1) 6. Check at the outsource provider, for completed work documents to ensure inspections, maintenance, preventive maintenance, or alterations performed were performed in accordance with the certificate holder's manual. *Sources:* 121.367(a); 121.135(b)(19); 121.369(b) 7. Check at the outsource provider, that a list of required inspection personnel is available for inspection by the Administrator in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(b)(1) 8. Check at the air carrier specified location, that a list of required inspection personnel is available for inspection by the Administrator in accordance with the certificate holder's manual. *Sources:* 121.371(d); 121.135(b)(1)	
3	Were the Outsource Organization process controls followed?	☐ Yes ☐ No, Explain
4	Did the records for the Outsource Organization process comply with the instructions provided in the certificate holder's manual? *Related Performance JTI's:* 1. Check at the records repository, to ensure that completed records of maintenance performed by persons outside the certificate holder's organization include the name of the person who performed that work and a general description (or reference to data) of that work in accordance with the certificate holder's manual. *Sources:* 121.369(c)(2); 121.135(a)(1); 121.369(c)(1) 2. Check at the outsource provider, to ensure that completed records of maintenance performed by it for the certificate holder includes the name of the person who performed that work and a general description (or reference to data) of that work in accordance with the certificate holder's manual. *Sources:* 121.369(c)(1); 121.369(c)(2); 121.135(a)(1) 3. Check at the records repository, to ensure that completed records of maintenance	☐ Yes ☐ No, Explain

performed by persons outside the certificate holder's organization include the name or other positive identification of the individual who approved the work performed in accordance with the certificate holder's manual.
Sources: 121.369(c)(3); 121.135(a)(1)

4. Check at the outsource provider, to ensure that completed records of maintenance performed by it for the certificate holder include the name or other positive identification of the individual who approved the work performed in accordance with the certificate holder's manual.
Sources: 121.369(c)(3); 121.135(a)(1)
5. Check at the records repository, for completed records of maintenance of persons performing required inspections for the certificate holder to ensure those persons were appropriately certificated, properly trained, qualified, and authorized to do so in accordance with the certificate holder's manual.
Sources: 121.371(a); 121.135(b)(19)
6. Check at the records repository, for completed records of maintenance of persons performing required inspections for the certificate holder to ensure those persons did not perform the item of work required to be inspected in accordance with the certificate holder's manual.
Sources: 121.371(c); 121.135(b)(19)
7. Check at the outsource provider, for completed work documents to ensure inspections, maintenance, preventive maintenance, or alterations performed were performed in accordance with the certificate holder's manual.
Sources: 121.367(a); 121.135(b)(19); 121.369(b)
8. Check at the outsource provider, that training records of personnel performing inspections, maintenance, preventive maintenance, or alterations for the certificate holder, verify they have been trained and qualified in accordance with the certificate holder's procedures and standards.
Sources: 121.367(b); 121.135(b)(16); 121.135(b)(19); 121.369(b)
9. Check at the records repository, for completed maintenance records of major repairs or major alterations accomplished by outsource organizations to determine that work was done in accordance with technical data approved by the Administrator.
Sources: 121.379(b); 121.135(b)(16)
10. Check at the outsource provider, that service difficulty reporting tasks required by Part 121.704 have been assigned to the certificated repair station by the Part 121 certificate holder.
Sources: 121.704(f); 121.135(b)(16)
11. Check at the air carrier specified location, that the certificate holder received copies of each Service Difficulty Report submitted for it by the repair station in accordance with the certificate holder's.
Sources: 121.704(f); 121.135(b)(16)
12. Check at the outsource provider, that no person is withholding Service Difficulty Reports even though all information required is not available in accordance with the certificate holder's manual.
Sources: 121.704(g); 121.135(b)(16)
13. Check at the training center, that training records of personnel performing inspections, maintenance, preventive maintenance, or alterations for the certificate holder, verify they have been trained and qualified in accordance with the certificate holder's procedures and standards.
Sources: 121.367(b); 121.135(b)(16); 121.135(b)(19); 121.369(b)
14. Check the aircraft release record, that each aircraft released to service by the outsource provider is airworthy following completion of inspections, maintenance, preventive maintenance, or alterations in accordance with the certificate holder's manual.

Sources: 121.367(c); 121.135(b)(16); 121.135(b)(19); 121.369(b)	
5 Were the process measurements for the Outsource Organization process effective in identifying problems or potential problems and providing corrective action for them?	☐ Yes ☐ No, Explain
6 Did personnel properly handle the associated interfaces by complying with other written policies, procedures, instructions, and/or information that are related to this element?	☐ Yes ☐ No, Explain

EPI SECTION 1 - PERFORMANCE OBSERVABLES -Drop Down Menu
1. Personnel.
2. Tools and Equipment.
3. Technical Data.
4. Procedures, policies or instructions or information.
5. Materials.
6. Facilities.
7. Controls.
8. Process Measures.
9. Interfaces.
10. Desired Outcome.
11. Other.

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES		
Objective: To determine if the person identified by the certificate holder as having responsibility and/or authority for the Outsource Organization process is qualified, knowledgeable, and recognizes that responsibility and/or authority. (The person with the authority may or may not be the person with the responsibility.)		
Tasks		
	To meet this objective, the inspector must accomplish the following tasks:	
1	Identify the person that has overall responsibility for the Outsource Organization process.	
2	Identify the person that has overall authority for the Outsource Organization process.	
	NOTE: If no personnel or major program changes (as defined by the principal inspector (PI)) affecting the responsibility or authority attributes for this element have occurred since the last SAI and/or EPI was accomplished, then do not perform tasks 3 - 6, below. Answer questions 2.1 and 2.2, below, and provide the name/title.	
3	Review the duties and responsibilities for those who manage the Outsource Organization process documented in the certificate holder's manual.	
4	Review the appropriate organizational chart.	
5	Discuss the Outsource Organization process with the management personnel identified in tasks 1 and 2.	
6	Evaluate the qualifications and work experience of the management personnel identified in tasks 1 and 2.	
Questions		
	To meet this objective, the inspector must answer the following questions:	
2.	Are the following aspects of the Management Responsibility and Authority Attributes addressed in the Outsource Organization process:	
2.1	Is there a clearly identified person who is responsible for the quality of the Outsource Organization process?	☐ Yes ☐ No, Explain Name/Title:
2.2	Is there a clearly identified person who has authority to establish and modify the certificate holder's policies, procedures, or instructions and information for the Outsource Organization process?	☐ Yes ☐ No, Explain Name/Title:
2.3	Does the responsible person acknowledge that he/she has responsibility for the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.4	Does the person with authority acknowledge that he/she has authority for the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.5	Does the person with responsibility for the Outsource Organization process meet the qualification standards?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.6	Does the person with authority to establish and modify the Outsource Organization process meet the qualification standards?	☐ Yes ☐ No, Explain

	☐ Not Applicable
2.7 Does the person with responsibility understand the controls, process measurements, and interfaces associated with the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.8 Does the person with authority understand the controls, process measurements, and interfaces associated with the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.9 Does the responsible person know who has authority to establish and modify the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable
2.10 Does the person with authority know who has the responsibility for the Outsource Organization process?	☐ Yes ☐ No, Explain ☐ Not Applicable

EPI SECTION 2 - MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES -Drop Down Menu
1. Assignment of responsibility.
2. Assignment of authority.
3. Does not understand procedures, policies or instructions and information.
4. Does not understand controls.
5. Does not understand process measurements.
6. Does not understand interfaces.
7. Span of control.
8. Position vacant.
9. Other.

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Figure 4-4-2. General Instructions for Completion of Element Performance Inspection (EPI) 1.x Data Collection Tools

The following general instructions provide explanations and guidance for each section of the Version 1.x Element Performance Inspection (EPI) Data Collection Tools (DCT). EPIs are accomplished by trained and qualified Federal Aviation Administration (FAA) operations, airworthiness, cabin safety, and/or dispatch aviation safety inspectors (ASI) assigned to an Air Transportation Oversight System (ATOS) Certificate Management Team (CMT) or a Certification Project Team.

ELEMENT SUMMARY INFORMATION

Purpose of this Element (Certificate Holder Responsibility)
Each element should be considered a process that is performed by a certificate holder. The purpose statement defines the intent of the element and the scope of the certificate holder's responsibility.

Objective (FAA Oversight Responsibility)
This defines the scope of the inspection in general terms.

Specific Instructions
Some DCTs may contain specific instructions for additional training, experience, or qualifications that may be helpful in determining inspector assignments. Specific instructions may also include additional references, background information, or manuals that should be reviewed, as well as suggestions for specific types of activities and/or reporting instructions.

Related EPIs
A list of related elements is provided primarily for reference and background information. Inspectors should review the DCTs for related elements. There may be situations when activities for one EPI may be accomplished in conjunction with activities of related EPIs.

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirement(s) (SRRs)
An SRR is a regulation from Title 14 of the Code of Federal Regulations (14 CFR) that is refined to its most specific level. SRRs are included with each EPI as a reference for the inspector. Questions that are based on regulatory requirements have an SRR appended to them. Therefore, a "No" answer to such a question may require an enforcement investigation. Questions that do not have an SRR appended to them are not regulatory in nature, but are based on system safety principles. A "No" answer to this type of question, while not a violation, might be an indicator of an increased level of risk that may require additional action on the part of the CMT.

Related CFRs and FAA Policy/Guidance
Related CFRs and FAA policy/guidance are included for background information that is necessary to accomplish the inspection.

At the time of publication, the guidance material was considered current. If the guidance has been updated since the DCT was published, the inspector should read the latest version even if it is not specifically mentioned in the tool. Subsequent revisions to the EPI DCTs will incorporate updates to this guidance material. However, revisions may not be generated based solely on outdated guidance. Even if it is outdated or superseded, the listed guidance may be useful as a starting point in researching current guidance.

EPI SECTION 1 – PERFORMANCE OBSERVABLES

Objective (FAA Oversight Responsibility)

The objective is to determine if the certificate holder follows its procedures, controls, process measures, and interfaces for the process, and to determine if the process is functioning as designed and achieving the desired results. To accomplish the objective, the inspector should complete the tasks identified on the DCT and answer each question in the section at least once.

Tasks

Each DCT contains the statement, "*To meet this objective, the inspector must accomplish the following tasks (at the inspection location(s) where applicable).*" The DCT then lists certain tasks that should be completed during the inspection. Each task is made up of various activities. Some common tasks that may be listed on an EPI are:

1. Review the information listed in the Supplemental Information section of this DCT.

A list of the SRRs, related CFRs, and FAA policy/guidance documents that are pertinent to the questions of the DCT for a given element are provided in the Supplemental Information section of the EPI. Regulatory and FAA policy/guidance references will also appear at the question level. The inspector reviews the related CFRs and FAA policy and guidance documents included with each EPI

2. Review the policies, procedures, or instructions and information, for the (element name) process contained in the certificate holder's manual.

The inspector reviews and gains an understanding of the certificate holder's policies and procedures for the element they are inspecting in order to plan their inspection activities. This will usually involve reviewing sections of the appropriate operations specifications (OpSpecs), manuals, training programs, or other guidance. A subsequent question will ask the inspector if the certificate holder followed its policies and procedures.

3. Review the associated Safety Attribute Inspection (SAI) for this element with emphasis on the controls, process measurements, and interface attribute sections.

A review of the associated SAI DCT and the results of any completed SAIs provide the inspector with useful information about the certificate holder's systems and can help the inspector to identify areas of potential risk. The Controls Attribute section of each SAI lists checks and restraints that must be built into the certificate holder's process to help ensure that the desired results are consistently achieved. While most controls are not regulatory, they are an important safety attribute with desirable features that help to reduce risk. The inspector will be asked in a subsequent question if the controls were being followed.

4. Observe the (element name) process to gain an understanding of the procedures, instructions, and information contained in the certificate holder's manual.
Each element defines a specific program or process that achieves certain results as described in the Purpose section of the EPI. The inspectors must plan to conduct various activities that will assist them in determining if the policies and procedures are being followed and if those policies and procedures are effective. For example, in assessing the results of a deicing EPI, the inspector may perform various activities at different locations. These activities may include inspecting the storage of deicing materials at station facilities, observing deicing in progress on various aircraft from the ramp, watching deicing procedures during cockpit or cabin en route inspections, and visiting the operations center during icing conditions.

5. Discuss the (element name) process with the personnel (other than management) who perform the duties and responsibilities required by the (program/process).
The purpose of an EPI is to determine if the certificate holder is following its approved policies and procedures, and to confirm that those policies and procedures are achieving the desired result. In completing this task, the inspector discusses the (program/process) with the certificate holder's employee or contractor to determine if policies and procedures are being followed. Results of these conversations allow the inspector to answer the specific question(s) contained in the DCT. DCT questions were not designed to be answered directly by the certificate holder personnel or contractor.

Questions
Each EPI lists a series of questions for the inspector to answer based on his/her observations during the various activities. Questions on each activity report are answered in response to what was observed on that single activity. Based upon the scope of the EPI and complexity of the certificate holder's process, inspectors should develop a plan of research, observation, inspection, and evaluation that will result in the gathering of quality data.

Job Task Items (JTIs)
JTIs are included with questions for inspector reference only. JTIs aid the inspector in determining if a certificate holder is following its written policies, procedures, instructions, and information, and if the desired results are being achieved. The inspector is not expected to respond to each JTI individually. The JTIs listed below each question are there to aid inspectors in answering the question.

Each EPI section includes the statement, "*To meet this objective, the inspector must answer the following questions."* The following paragraphs describe some of the typical questions in each section of the DCT.

1. Were the following performance measures met?
Each EPI lists performance measures that are specific to that element. Performance measures determine if the certificate holder's process is achieving the desired results as described in the purpose of this element (certificate holder responsibility) section." Although it's not a prerequisite, performance measures are mostly based on regulatory requirements.

2. Were the certificate holder's policies and procedures, instructions, and information contained in its manual for the (element name) process followed?
The inspector must gain a thorough understanding of the certificate holder's policies and procedures to answer this question. Responses are only for the activity currently being conducted. All policies and procedures will not be observed during each activity. In certain instances, question 2 and some parts of question 1 may seem to be repetitive. Each of those questions should still be answered independently of the other. Question 1 is focused on the results of the performance measures that are built into the certificate holder's process. Question 2 is focused on the certificate holder's policies and procedures themselves.

3. Were the (element name) process controls followed?
This question refers to the controls that are identified in the associated SAI controls attribute section. Controls are checks and restraints that must be built into the certificate holder's process to help ensure that the desired results (purpose of the element) are consistently achieved. A review of those controls will help the inspector answer this question. Not all the controls will be observed during each activity.

4. Did the records for the (element name) process comply with the instructions provided in the certificate holder's manual?
The inspector must understand the certificate holder's system sufficiently to know which records and reports are generated or used during the processes and procedures for the element. A representative sample of these records should be reviewed and assessed for compliance with regulations and the certificate holder's policies, procedures, instructions, and information. A separate activity record is not necessarily required for each individual record or report, but should be completed for each group of records or reports at a specific location on the date of observation.

5. Were the process measurements for the (element name) process effective in identifying problems or potential problems and providing corrective action for them?
The inspector will review the Process Measurements section of the SAI and certificate holder's manuals to understand which measures the certificate holder has designed into the process. The inspector will conduct activities to determine if the process measurements were effective in identifying and providing corrective action for problems or potential problems.

6. Did personnel properly handle the associated interfaces by complying with other written policies, procedures, or instructions and information that are interrelated with this element?
This question focuses on the interactions between the process under inspection and other processes within the certificate holder's organization.

EPI SECTION 2 – MANAGEMENT RESPONSIBILITY & AUTHORITY OBSERVABLES

NOTE: Automation will provide the CMT with the ability to enable or disable this section of the EPI. If an inspector is not required to complete Section 2, it will not be displayed to the inspector.

Objective

To determine if the person identified by the certificate holder having responsibility and/or authority for the process is qualified, knowledgeable, and recognizes that responsibility and/or authority. (The person with the authority may or may not be the person with the responsibility.)

Tasks

1. Identify the person who has overall responsibility for the (element name) process.
The intent is to identify the highest-level person within the organization who is responsible for the quality of the process. The person who is responsible for the quality of the process may or may not be the person with the authority to change the process. A person may be an individual, a department, a committee, or a position.

2. Identify the person who has overall authority for the (element name) process.
The intent is to identify the highest-level person within the organization who has authority to change the process. The person who has the authority to change the process may or may not be the person with the responsibility for the quality of the process. A person may be an individual, a department, a committee, or a position.

- If there have not been any personnel or program changes, as defined by the principal inspector (PI), affecting the responsibility or authority attributes since the last SAI and/or EPI was accomplished, then do not perform tasks 3-6. Answer questions 2.1 and 2.2, and provide the name/title. Then click on the N/A button in the Tasks section. This will select the "Not Applicable" block for questions 2.3 – 2.10 and enter "No change" in the comment block.

3. Review the duties and responsibilities for the person(s) who manages the (element name) documented in the certificate holder's manual.
The inspector must understand the certificate holder's system sufficiently to know the duties and responsibilities of individuals responsible for, or with the authority to establish or modify, each process.

4. Review the appropriate organizational chart.
The inspector must understand the certificate holder's organization sufficiently to identify who has the authority to establish or modify, and/or responsibility for certain processes. In any organization there is not always one individual who is in charge. Authority and responsibility are often disbursed. A person can be an individual, a department, a committee, or a position (such as pilot-in-command).

5. Discuss the (element name) with the management personnel identified in tasks 1 and 2.
DCT questions are not to be asked of, and answered by, certificate holder personnel during interviews or discussions. In completing this task, the inspector asks questions to find out if the identified person(s) who is responsible for, and/or who has the authority to establish or modify, a process understands the certificate holder's policies and procedures for the process. The inspector should not ask a person, "Are you responsible?" He or she should instead ask questions and make observations to find out enough about how the carrier performs that process to determine who is responsible.

6. Evaluate the qualifications and work experience of the management personnel identified in tasks 1 and 2.
The purpose of this task is to determine that the individual responsible for, or with the authority to establish or modify, a process meets the qualifications to hold that position. In some instances, there may be regulatory requirements for those qualifications. In other instances, the qualifications may be demonstrated by reviewing the individual's FAA certificate, training records, or particular background or expertise. A formal written resume is not required from all individuals to determine if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. The person with the authority to change the process may or may not be the person who is responsible for the quality of the process.

Questions
Each EPI lists a series of questions for the inspector to answer based on his/her observations during the various activities. Questions on each activity report are answered in response to what was observed on that single activity. Based on the scope of the EPI and complexity of the certificate holder's process, inspectors should develop a plan of research, observation, inspection, and evaluation that will result in the gathering of quality data.

2.1 and 2.2
The purpose of these questions is to identify by name and title the person who is responsible for the quality of the process and the person who has the authority to establish and modify the process.

2.3-2.10
Answer these questions if there have been changes in personnel or the program that affect the responsibility and authority attributes for the process. If there have not been changes in personnel or the program that affect the responsibility and/or authority attributes, reporting inspectors can select an auto-fill feature to mark these questions "No Change."

Drop-Down Menus
A "No" response requires the inspector to select one or more potential problem areas that caused the "No" response from the associated drop-down menu. The inspector must include an explanation in the "No" comments box for each area selected. If the choices available do not adequately describe the observation, he/she will select "Other" and provide an explanation in the comment block.

Master EPI Record

All questions in the Performance Observable section, and at least questions 2.1 and 2.2 in the Management Responsibility and Authority Observables section must be answered to save the EPI to the master record. As a general rule, most EPIs should be completed within 90 days. This time frame begins on the date when the inspector opens the first activity and closes when the last activity is saved to final and the record containing all associated activities is saved to the master record by the inspector. This timeframe does not include the Data Evaluation process.

Multiple inspection activities will typically be accomplished for each EPI. When reporting an individual EPI activity, the ASI enters responses only to those questions that can be answered directly from the activity being reported. Each inspector will conduct as many individual activities as necessary to accurately answer the questions.

EPI Activities

EPIs usually involve multiple activities over multiple dates and may involve multiple locations (a sufficient number of activities to answer all the questions and perform a thorough, quality inspection). A general rule of thumb is that any time that the common data field information changes (date, location, aircraft, etc.), it is a new activity. It is not the intent to have an activity record for every individual record you look at, but maybe each set of records at that location on that day. Since an activity is a snapshot of what the operator is doing at that moment, most activities will probably be opened and closed in a single day.

EPI Common Data Fields

Enter all the information that is available from each activity. At a minimum, every inspection activity should include Activity Start Date, Activity End Date, and Departure Point/Location. If the inspection activity involves an aircraft, the registration number and make, model, and series must be entered. If the activity involves an aircraft flight, the arrival point, departure point, and flight number must be entered. If the activity includes an en route inspection, the control number from FAA Form 8430-13, Request for Access to Aircraft, must be entered. Additional guidance for each data field is found in the ATOS Automation User Guide.

Response Definitions

Since the EPI questions are answered with either a "Yes" or "No," and for some EPI questions a third answer option of "N/A," it is important to understand the implications of those answers.

- A "**Yes**" response means that the specific question being asked, for the particular EPI activity being observed, complies with applicable SRRs, related CFRs, and/or any FAA policies or guidance appropriate to that element. A "Yes" response also indicates that the observed procedures and system safety principles approved/accepted for the certificate holder are being followed.

- A "**Yes**" response always indicates a positive response. Great care should be taken when determining if the response is positive. If the inspector indicates a positive answer using a qualifier (e.g., "Yes, but…") this may indicate that the answer should actually be a "No." In that case, the inspector should re-evaluate his/her answer.

- There may be rare circumstances that it is not possible to observe an event listed on

the EPI (e.g., boarding of an intoxicated passenger). On those EPIs the questions are worded so that a "Yes" answer would indicate compliance since the event was not observed. The specific instructions for those EPIs have further details on how to appropriately answer the questions.

- A "**No**" response means that on the specific question being asked, for the particular EPI activity being observed, the certificate holder either does not comply with observed SRRs, related CFRs, and/or applicable FAA policies or guidance for that element, or that the certificate holder's procedures are not being followed. A "No" response can also mean inadequate inclusion of safety attributes in the area being evaluated or that the certificate holder's approved/accepted procedures are inadequate.

- An "**N/A**" response means that a particular question does not apply to the certificate holder being evaluated because of type of operation, type of aircraft, area of operation, etc. "N/A" does not mean "not observed" or that not enough time was available to answer the question. If a question applies to a certificate holder, then enough observations should be conducted to appropriately answer the question. Since this option is associated only with questions that are not applicable due to the types of operations authorized for the particular certificate holder, a simple comment must be entered as to why this was marked "N/A" (e.g., Certificate holder does not conduct flag operations).

Observed noncompliance with regulations necessitates coordination with the PI and may result in an enforcement investigation. An *enforcement investigation would not be required* when a "No" response identifies weaknesses in a system that has literal compliance with the regulations or in the case where, in the inspector's opinion, any approved/accepted procedures are inadequate.

NOTE: Significant issues or items of immediate concern, as determined by the inspector, will be verbally conveyed to the PI in a timely manner. Either an electronic message or memorandum should follow up verbal conveyance.

Comment Fields

All comments should be written in clear, concise language, using sentence case and proper spelling. Explanations should be complete and descriptive, with as much information as necessary for other CMT members to understand the comments without requiring further information from the inspector. Comments submitted in the ATOS automated tools should include who, what, where, when, why, and how. References may be entered when appropriate.

ASIs should not enter the word "None" in any comment field. If a particular comment field does not apply, it should be left blank. Comment fields should be used to report observed facts, not inspector opinion. Comments that do not directly relate to the question being answered are inappropriate. An important function of the data evaluation program manager (DEPM) is the review of comment fields to ensure that quality data enters the ATOS database. *The DEPM will return any records for correction that do not meet the ATOS Data Quality Guidelines.*

Figure 5-1. ATOS Surveillance Reporting Guidelines

- **General instructions for reporting Safety Attribute Inspection (SAI)/Element Performance Inspection (EPI) activities**

— SAIs and EPIs usually involve multiple activities over multiple dates and may involve multiple locations (a sufficient number of activities to answer all the questions and perform a thorough, quality inspection).
— The inspection record comprises all of these individual activity records.
— The Air Transportation Oversight System (ATOS) policy and procedures appendix includes very little about inspection activities. Inspectors have had a lot of questions about how many to do and how to know when it is time to close an activity.
— A general rule of thumb is that any time that the banner information (date, location, aircraft, etc.) changes, it is a new activity.
— It is not the intent to have an activity record for every individual record, but maybe each set of records at that location on that day.
— The function may be more important than the time or place.
— Most activities will probably be opened and closed in a single day.
— An activity is a snapshot of what the operator is doing at that moment.
— To get a clear, big picture, go out again and take another snapshot.
— Don't try to become an analyst and "roll up" the individual observations into a single activity to report.

- **Reporting observations unrelated to the SAI or EPI**

— "Pop-ups" are things that an inspector happens upon while out in the field, or special inspection requirements that come up.
— The Dynamic Observation Reports (DOR) provide a place to record surveillance observations that are unrelated to the element inspection being performed.
— Special inspection requirements can generally be accommodated through a Constructed Dynamic Observation Report (ConDOR) or by retargeting surveillance.
— Handbook bulletins that require special surveillance activities generally include specific instructions for ATOS carriers.

- **ATOS does not change an inspector's responsibility to investigate and act on safety or regulatory concerns**

— There is nothing to preclude inspectors from investigating something they notice or have reported to them concerning an ATOS carrier, but that is an investigation activity, not a surveillance activity.
— Investigation, certification, and technical administration activities are still reported under the Program Tracking and Reporting Subsystem (PTRS).
— Remember to record the actions you have taken related to deficiencies observed in the Reporting Inspector Action Taken field.
— In addition, promptly notify the principal inspector (PI) or other appropriate certificate-holding district office (CHDO)/certificate management office (CMO) personnel via telephone or electronic mail if you observe a significant safety or regulatory concern that required your immediate action or may need additional investigation.

- **SAI/EPI inspection screen data fields**

— Enter all the information you have available from that activity.
— Do NOT enter the word "none." If a particular comment field does not apply, just leave it blank.
— At a minimum, every inspection activity should include the activity start date, activity end date, and departure point/location.
— If the inspection activity involves an aircraft, the registration number and make, model, and series must be entered.
— If the activity involves an aircraft flight, the arrival point, departure point, and flight number must be entered.
— Specific instructions for conducting each EPI and reporting those activities are found in that data reporting tool.
— Guidance for each data field is found in the ATOS Automation User Guide and in the ATOS Data Quality Guidelines.

- **Entering comments**

— Write in clear, concise language using sentence case and proper spelling.
— Explanations should be complete and descriptive, with as much information as necessary for other Certificate Management Team (CMT) members to understand the findings without requiring further information from the inspector.
— References should be entered when appropriate, such as recording on the SAI where the procedures and controls for that element are located.

- **Name of a clearly definable person**

— Some questions require that a name be entered.
— There is confusion on the intent of this question and the definition of the word "person."
— In any organization, there is not always one individual who is in charge; authority and responsibility are often disbursed.
— A person can be an individual, a department, a committee, or a position.
— The intent is to identify the highest level person who is responsible or has the authority for that particular element of the air carrier's system.

- **"Yes" responses**

— The data reporting tool questions are written so that "Yes" is always a favorable response.
— Read the question and answer it based on just the activity that was performed.
— For example, if the question asks, "Were written procedures consistent across manuals?" respond to that question only as it relates to the manuals you looked at during that activity. If you only looked at one manual, don't answer the question.

- **"Yes" responses do not require comments**

— "Yes" comments should not change the meaning of the "Yes" response to "Sometimes" or "Maybe."
— Any negative wording in a "Yes" comment is inappropriate and probably indicates that the question should have been answered "No."
— The comment/findings should be complete and descriptive.
— The comment field is not intended to capture negative, unsatisfactory, or qualifying (yes, but) information.
— The comment field is not intended as a catchall for describing inspection activities.

- **"Maybe"**

— There is no "Maybe" response. Questions are answered either "Yes" or "No."
— If the inspector is unsure whether something observed was unsatisfactory or potentially unsatisfactory, the question should not be answered for that activity.
— The inspector needs to do additional research and plan another activity, to make a definitive determination.

- **"No" responses**

— The data reporting tool questions are written so that "No" always indicates a negative response to the question.
— Read the question through and answer it based on just the activity that was performed.
— The intent was never that a single "No" answer would equate to an unsafe condition or a regulatory violation, unless that particular "No" has a regulatory basis.
— The safety attributes on an SAI are organizational principles that provide a frame of reference to inspectors as they evaluate an operator's systems. A "No" answer for a system safety based question simply identifies a risk factor that requires further analysis.
— A "No" answer for a regulatory requirement would be handled through established compliance and enforcement procedures.
— Inspectors must be very careful in requiring air carriers to satisfy all questions. Inspectors should never require a response from the air carrier for each and every "No" answer.
— Regulatory requirements (referenced on each data reporting tool) are the minimum safety standards and must be complied with where as system safety raises safety above this minimum.

- **Writing explanations on "No" responses**

— "No" answers require an explanation of the who, what, where, when, and how that caused the "No" response.
— "No" responses provide valuable information that, when rolled up and analyzed with other similar data, may well lead to an increase in surveillance of a particular system element process even though no regulations were violated.
— The explanations are captured in a database that is analyzed for trends or patterns to determine if any action is required by the CMT.

- **"Not Applicable" (N/A)**

— "N/A" means not applicable at all to that air carrier's operation.
— It does not mean you didn't look at that item.
— There really are questions that do not apply to an air carrier.
— If the question is not applicable to the specific activity or observation the inspector is making at that point in time, then leave the question unanswered.
— Misuse or overuse of not applicable corrupts the data.

- **Inspector action taken**

— This field provides a place to record actions taken by reporting inspectors related to deficiencies observed during the inspection.
— These actions may include notifying appropriate air carrier personnel of a potential noncompliance, consulting with air carrier or other FAA officials to obtain additional information, or initiating an enforcement investigation.

— Do not enter a description of what you did to complete the particular inspection activity being reported. The intent of this field is NOT to capture what records you looked at or processes you observed.

- **PI response requested**

— The purpose of this field is to help the reporting inspector bring some specific information to the attention of the PI.
— By checking this field, the inspector is asking the PI to review some information contained in the report and give the inspector some feedback.
— This is not intended for use with time-critical information that needs a rapid response since the information is not available to the PI until after it has been evaluated and released to the ATOS Data Repository.

Figure 5-3. ATOS Data Quality Guidelines

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- **The Need for Quality Data**

— The Evaluation module is used to validate the data collected through the Surveillance Implementation process and to ensure that only high-quality information enters the Air Transportation Oversight System (ATOS) Data Repository for analysis.
— The Evaluation process provides the Certificate Management Team (CMT) with the means to evaluate the data collected through surveillance before the data enters the ATOS Data Repository.
— The output of the Evaluation process is valid, accurate, technically relevant, and complete surveillance data that are ready for the Analysis process.

- **What is Quality Data?**

— Why collect data in the first place? Data collection has always been a part of problem resolution and an integral part of the scientific method. Data collection serves to help describe, document, and ultimately analyze existing conditions of an air carrier. It supplies information to support decisionmaking and communication.
— *Data is a set of facts that when compiled provides information for decision-making. Data represents real-world objects.*
— *An acceptable level of quality has been achieved if the data conforms to a defined specification and the specification correctly reflects the intended use.*
— Quality data provides a reliable measurement tool to assess the regulatory compliance and system safety of an air carrier. Quality data helps close the gap between the views of the real-world air-carrier system obtained by direct observation, and the view of the air carrier system obtained through data in the information system.

- **What is Poor Quality Data?**

— When the data doesn't reflect real-world conditions and is not easily understood, this indicates poor quality data.
— Even accurate data, if it is redundant, or not interpretable by the user, is of little value. If the data is of insufficient quality, most of it will be unusable.
— Poor quality data is costly. Some of the impacts of poor data quality may include increased operational cost, difficulty in setting and executing strategy, and less effective decisionmaking.

- **Impact of SAI/EPI/DOR Answers on Data Quality**

— Before answering "Yes," "No," or "N/A" to an Element Performance Inspection (EPI), Safety Attribute Inspection (SAI), or Dynamic Observation Report (DOR) question, it is important to understand the impact of the answer in regards to data quality. *Each reporting inspector* has the responsibility to submit complete, accurate and quality inspection data.
— The collection and control of data can be constructed so the ATOS database meets the needs of the CMT in an efficient manner.

- **Measuring Data Quality**

— Some commonly used attributes or characteristics to measure data quality include accuracy, completeness, consistency, reliability, timeliness, uniqueness, and validity. As with the attributes in ATOS, interdependencies exist between data quality attributes.
— In order to assess the quality, data can be categorized into basic components called dimensions. Dimensions are aspects of data quality such as security, accuracy, objectivity, etc. ATOS controls some data quality dimensions through automation.
— Grouping attributes into the dimensions listed in the *Data Dimensions Table* below should help the inspector properly construct their comments to be complete and descriptive. Further, using the guidance listed below should help organize the information necessary to ensure comprehensibility and proper interpretation of the information.

- **Reporting Inspector Responsibility**

— Inspectors play an important role by incorporating certain data dimensions in their reporting. Before submitting an inspection record, a dimensional review of the data should be accomplished, thus reducing the possibility of non-concurrence or being returned to the inspector for corrections.
— Before submitting a DOR, the reporting inspector should accomplish a dimensional review of the data and ensure that the DOR meets one of the following criteria:
  - Single-activity unplanned observation that is unrelated to the ATOS system element being inspected.
  - Single-activity unplanned observation where there is not an ATOS element that addresses the unique situation.
  - Observation that is related to the system element being inspected but is not covered by any of the Data Collection Tool (DCT) questions for that element.
  - Observation made during a specific inspection events that is directed by handbook bulletin or other national directive.

  A *Data Dimensions Table* and a *Specific Data Requirements Table* are included in this figure as tools for increasing the quality of inspection records.

- **Data Evaluation Program Manager (DEPM) Responsibility**

— DEPMs will use the following tables for determining acceptable levels of data quality during their evaluation of inspection records. If the data meets the defined data dimensions and specific data requirements that the DEPM is able to evaluate, the DEPM will indicate concurrence and save the record to the ATOS Data Repository. The data will then be ready for analysis.
— The DEPM will return any inspection records that do not meet the data dimensions or specific data requirements. The DEPM will coordinate with the reporting inspector in an effort to resolve the data quality discrepancies.
— The DEPM will return any DORs that do not meet the data dimensions, specific data requirements, or criteria listed under “Reporting Inspector Responsibility” in the preceding section. The DEPM will coordinate with the reporting inspector in an effort to resolve the data quality discrepancies.

— If, after conferring with the DEPM, the inspector still believes that the data conforms to the applicable data dimensions, the inspection record is retained in its original form. The DEPM will save the record to the ATOS Data Repository and enter a non-concurrence comment in the inspection record explaining the reasons for non-concurrence.
— Any SAI or EPI record that is saved to the ATOS Data Repository with a non-concurrence requires review and comment by the appropriate principal inspector (PI).

- **Manager Responsibility**

— Managers and supervisors have an important role in the oversight of all CMT activities, including the reporting of data.
— Managers and supervisors should ensure that inspectors who work for them record their surveillance activities promptly and that the inspectors adhere to the Data Quality Guidelines.
— Certificate management office (CMO) managers, to ensure its proper use, should closely monitor the use of DORs for their CMT.

Data Dimensions Table		
NOTE: Data dimension applicability is shown in parenthesis		
Data Dimension	**Definition**	**Measurement Examples**
Accuracy (SAI, EPI, DOR, ConDOR)	Data must be technically correct, reliable, and free of error.	• All explanations and comments should be grammatically correct, using sentence case and proper spelling. • Code of Federal Regulations (CFR) and other references should be included, where appropriate.
Appropriate Amount of Data (EPI)	PIs may recommend *a minimum number, location, and scope* of inspection activities, but the inspector assigned the EPI has the responsibility for identifying the number of activities needed to make the assessment to include complying with the PIs minimum recommendations. The number of activities required to properly assess a given element may vary considerably. Enough activities should be performed to accurately answer the questions on the DCT. It is not reasonable to perform enough activities to ensure a specific statistical level of confidence. Instead, the activities conducted should be varied across time and location to obtain sufficient amounts of quality observations to reflect the performance (EPI) of the system element.	• The number of activities required to answer all EPI questions varies depending on the complexity of the air carrier system, the size of the air carrier and other factors. Generally, it takes at least five to ten surveillance activities to answer all the EPI questions • The reporting inspector should follow the PI instructions that pertain to the scope (time, location, etc.) of the inspection.
Appropriate Amount of Data (SAI)	Each SAI question should be answered only once to evaluate the adequacy of the system element.	• SAI team coordinators (TC) should work with team members to plan inspection activities and ensure that each DCT question is answered once during the course of the inspection. • Although multiple activities may be required to complete an SAI, team members should avoid multiple responses to individual SAI questions. • If there was one “No” and four “Yes” answers, the answer is still “No” with an explanation that includes the fact that there were four “Yes” answers.

Data Dimensions Table		
NOTE: Data dimension applicability is shown in parenthesis		
Data Dimension	**Definition**	**Measurement Examples**
Appropriate Amount of Data (DOR)	Each DOR will consist of a single activity observation. If an observation consists of multiple findings related to the same system, subsystem, or element, a single DOR will be completed. If an observation consists of multiple findings relating to several different systems, subsystems, or elements, a new DOR will be completed for each separate finding.	• Record a single-activity unplanned observation that is unrelated to the ATOS system element being inspected. • Report a single-activity unplanned observation where there is not an ATOS element that addresses the unique situation. • Report a single-activity unplanned observation that is related to the system element being inspected but is not covered by the DCT questions. • Report a single-activity unplanned observation on specific inspection events as directed by handbook bulletin or other national directive.
Appropriate Amount of Data (ConDOR)	The ConDOR is a special purpose DOR constructed by PIs with instructions to inspect and report on specific areas of immediate concern.	• Follow PI instructions to inspect and report on a specific area of immediate concern. • All questions must be answered.
Completeness (SAI, EPI, DOR, ConDOR)	Data must be of sufficient breadth, depth, and scope for the task at hand. All necessary and relevant data is captured to show as complete a picture of the situation as possible.	• All applicable common data field information should be entered. • At a minimum, every activity must include the activity start date, activity end date, and departure point/location. • If the activity involved an individual aircraft, the registration number and make, model and series must be entered. • If the activity involved an aircraft fleet, the make and model must be entered. • If the activity involved an aircraft flight, the arrival point, departure point, flight number, and 8430-13 number must be entered. • Explanations must include the who, what, where, when, why, and how to describe the observation. • Observations on SAI, EPI, DOR, or ConDOR that result in a "No" response due to an *unsafe condition or possible regulatory noncompliance* require action by the observing inspector that must be reported in the "Reporting Inspector Action Taken" text block. • Element-based observation DORs must include a response to at least one question with an explanation or comment, if applicable. • Other observation DOR must include a

Data Dimensions Table		
NOTE: Data dimension applicability is shown in parenthesis		
Data Dimension	**Definition**	**Measurement Examples**
		complete description of the observed condition in the "Comment" block. • ConDORs must include a response to all questions with an explanation or comment, if applicable.
Consistency (SAI, EPI, DOR, ConDOR)	The data should be presented in the same format and be compatible with previous data.	• EPI/DOR/ConDOR: Responses, explanations, and comments within the activity report should not conflict with other responses, explanations, and comments within the *same activity report.* • SAI: Responses, explanations, and comments within the activity report should not conflict with other responses, explanations, and comments within the *same activity report*, or any other activity report within the *same inspection record*.
Ease of Understanding (SAI, EPI, DOR, ConDOR)	Data must be clear, without ambiguity, and easily comprehended.	• All explanations and comments should be written in clear, concise language. • Any abbreviations or non-defined acronyms used should be commonly understood within the aviation industry. • The DEPM must be able to read and understand what the explanation or comment means. • Explanations and comments must be complete and descriptive, with as much information as necessary for someone knowledgeable with the air transport industry to understand without requiring further information.

Data Dimensions Table		
NOTE: Data dimension applicability is shown in parenthesis		
Data Dimension	**Definition**	**Measurement Examples**
Objectivity (SAI, EPI, DOR, ConDOR)	Data must be unbiased (unprejudiced) and impartial.	• Explanations must be statements of fact or fact-based conclusions, based on actual observations, rather than inspector opinions.
Relevancy (SAI, EPI, DOR, ConDOR)	The data should be valid and applicable to the observation or question being answered.	• The response, explanation, or comment should directly relate to the specific question asked, and the "Yes," "No," or "N/A" response that was selected for that question. • The methodology used to collect the data was appropriate. • Explanations and comments should not include administrative information. (i.e., "James Doe completed initial operating experience satisfactorily.")
Timeliness (SAI, EPI, DOR, ConDOR)	The age of the data must be appropriate for the task at hand. The inspection record should not be left open as a means to collect information that may present itself in the future.	• Most activities should normally be opened and closed in a single day. • The inspection data should be entered into the activity report and saved to final status as soon as practical after the activity is completed. • Most EPIs should be completed within 90 days. This time frame begins on the date when the inspector opens the first activity and closes when the last activity is saved to final and the record containing all associated activities is saved to the master record by the inspector. This timeframe does not include the Data Evaluation process. The CMT should complete a minimum of 75% of its EPIs within this timeframe. • Most SAIs should be completed within 120 days. This time frame begins on the date when the inspector opens the first activity and closes when the last activity is saved to final and the record containing all associated activities is saved to the master record by the inspector. This timeframe does not include the Data Evaluation process. The CMT should complete a minimum of 75% of its SAIs within this timeframe. • Since DORs record single activity observations, they should generally be completed within a single day. • The reporting inspector should adhere to SAI/EPI instructions provided by the principal on timelines.

Value Added (SAI, EPI, DOR, and ConDOR)	Data should be beneficial and provide advantages from their use.	• The word "None" will not be entered as an explanation, nor will it be entered in any comment field. • Each explanation and comment must stand-alone and not refer to the response for another question (i.e., "see above" or "same as question 3"). • Inspectors should not enter a description of what they did to complete the particular inspection activity being reported. • DORs and ConDORs should be used only to report an observation that the inspector has made. They are not used simply to make a record of an activity that was performed.

Specific Data Requirements Table		
Field	**DOs and DO NOTs**	**Examples and Explanations**
Note: Field applicability is shown in parenthesis		
System (DOR)	• **DO** enter the appropriate system applicable to the observation from the drop down list provided for the field.	• If the observation that occurred can be related to an ATOS system, select the appropriate system from the drop-down list. • Example: "1.0 Aircraft Configuration Control."
Sub-system (DOR)	• **DO** enter the appropriate subsystem applicable to the observation from the drop down-list provided for the field.	• If the observation that occurred can be related to an ATOS subsystem, select the appropriate subsystem from the drop-down list. • Example: "1.3 Maintenance Organization."
Element (DOR*) **Applies only to "Element-Based Observation" DOR*	• **DO** enter the element applicable to the observation from the drop down list provided for the field.	• If the observation that occurred can be related to an ATOS element, select the appropriate element from the drop-down list. • Example: "1.3.1 Maintenance Program."
Air Carrier (DOR)	• **Do** enter the air carrier applicable to the observation from the drop-down list provided for the field.	• The report must be directed at a specific air carrier. • The default value for the air carrier is the air carrier to which you are assigned. However, inspectors can submit a DOR for any air carrier. • Select the air carrier's name from the drop-down list provided. • Only ATOS air carriers are available in the drop-down list.
PTRS Activity Code (DOR*) **Applies only to "Other Observation" DOR*	• **Do** enter the appropriate Program Tracking and Reporting Subsystem (PTRS) activity code applicable to the observation from the drop-down list provided for the field.	• If the observation that occurred can be related to a PTRS activity code, select the appropriate code from the drop-down list. Note: Only 16XX, 36XX, and 56XX surveillance codes are available. This field is for analytical purposes only.
	• **DO NOT** use the DOR to report a PTRS activity that was performed, such as an en route inspection.	• En route inspections, which are not conducted as part of an EPI, will be reported in PTRS. • Other PTRS surveillance activities are not authorized under ATOS.
Activity Start Date (SAI, EPI, DOR, ConDOR)	• **DO** select today's date (default) or select month, day, and year from the drop-down menu or open the pop-up calendar from which a date can be selected.	• "May 5 2004" • The appropriate date may be the default date (today's date) or may be selected from the drop-down menu or from the pop-up calendar.
Activity End Date (SAI, EPI, DOR, ConDOR)	• **DO** select today's date (default) or select month, day and year from the drop-down menu or the pop-up calendar.	• "May 5 2004" • The appropriate date may be the default date (today's date) or may be selected from the drop-down menu or from the pop-up calendar.
Departure Point/Location	• **DO** enter an airport identifier in the Departure Point/Location field for all	• If the surveillance activity was not conducted on an airport, enter the airport identifier that was closest to the site of the surveillance in the Departure

Specific Data Requirements Table		
Field	**DOs and DO NOTs**	**Examples and Explanations**
(SAI, EPI, DOR, ConDOR)	surveillance activities.	Point/Location field.
	• **DO** enter the 3-letter Federal Aviation Administration (FAA) airport identifier for airports within the 50 United States using all capital letters.	• "SFO" for San Francisco Intl airport.
	• **DO** enter the 4-letter International Civil Aviation Organization (ICAO) airport identifier for airports outside of the 50 United States using all capital letters.	• Use "EGLL" for the London-Heathrow airport instead of the "LHR" OAG identifier.
	• **DO NOT** use OAG or carrier created identifiers.	• This normally applies only outside of the 50 United States. Use "MMMX" for Mexico City instead of the "MEX" OAG identifier.
Arrival Point (SAI, EPI, DOR, ConDOR)	• **DO** enter the 3-letter FAA airport identifier for airports within the 50 United States using all capital letters.	• Enter "ATL" for "The William B. Hartsfield Atlanta Intl" airport.
	• **DO** enter the 4-letter ICAO airport identifier for airports outside of the 50 United States using all capital letters.	• Use "RJAA" for the "New Tokyo Intl" airport instead of the "NRT" OAG identifier.
	• **DO** enter an airport identifier for the arrival airport if a flight number was entered in the Flight Number field.	• All scheduled flights have an arrival airport and a destination airport published. Make an entry for both airports. If a flight diverts to a new destination, enter the identifier for that airport, not the scheduled arrival point.
	• **DO NOT** use OAG or carrier created identifiers.	• This normally applies only outside of the 50 United States. Use "TJSJ" for San Juan, Puerto Rico instead of the "SJU" OAG identifier.
Certified Repair Stations Number (SAI, EPI, DOR, ConDOR)	• **DO** enter the full Flight Standards designated certificate number of the repair station.	• An example of a foreign repair station number is "OXEY097L" for Aeroelectronica. A domestic repair station number example is "XE5R213O" for Texas Aero Engine Services.
	• **DO NOT** use lower case letters in the entry.	• "abcd1234r" is not an acceptable entry.
Aircraft Registration Number (SAI, EPI, DOR, ConDOR)	• **DO** enter an aircraft's full registration number using the drop-down table if an individual aircraft was involved in the surveillance observation. • **DO** include the registration prefix as part of the entry.	• "N123DL" • Some U.S. air carriers may use foreign registered aircraft. For statistical analysis reasons, it could be important to be able to discern what country holds the aircraft's registration. Valid examples include: • "N123DL," United States • "N123AA," United States • "G4321," Great Britain

Specific Data Requirements Table		
Field	**DOs and DO NOTs**	**Examples and Explanations**
Make, Model, Series (SAI, EPI, DOR, ConDOR)	• **DO** select a Make-Model-Series or a Make-Model from the drop-down list provided for the field if the activity involved aircraft.	• If a particular aircraft was involved as the subject of the surveillance or directly involved in the surveillance, enter a Make-Model-Series from the drop-down list. • If the activity was oriented to a fleet of aircraft that include several series of like Makes and Models, enter just the Make-Model from the drop-down list.
	• **DO NOT** enter a Make-Model-Series or a Make-Model if the activity did not involve aircraft.	
Flight Number (SAI, EPI, DOR, ConDOR)	• **DO** enter the flight number if a revenue flight was involved in the observation and the reporting inspector was on-board the flight.	• Maintenance, training, and administrative non-revenue flight numbers may be entered if they are known. However, they are not mandatory.
	• **DO NOT** enter a prefix to the flight number.	• A valid flight number entry for an American Airlines flight could be "1247". • An invalid flight number entry for the same American Airlines flight would be "AA1247". • The automation knows the carrier was American Airlines because the record is associated with the American Airlines CSP.
Simulator Device ID (SAI, EPI, DOR, ConDOR)	• **DO** enter the correct "Simulator ID" when a simulator was involved in the surveillance.	• The correct Simulator ID can be verified by the simulator certificate or by the "SIMULATR.DB" Paradox table in the "FSAS" folder located on your local area network.
FAA 8430-13 Number (SAI, EPI, DOR, ConDOR)	• **DO** enter the 8430-13 number when the purpose of being in the airplane is to perform an SAI or EPI inspection activity or Constructed Dynamic Observation Report (ConDOR) activity, or when the inspector wants to record a DOR.	• If an 8430-13 was used during en route inspections, which do not involve any ATOS activities or observations, the 8430-13 should be entered in PTRS.
Response Not Answered (Left Blank) (SAI, EPI)	• **DO** schedule another SAI or EPI activity to observe the element question at a later time, if the question's subject was not observed during the activity and is applicable to the carrier.	• If the element question asked, "Were the written procedures adhered to for the AD Management process?" and no procedures were observed the response should not be selected and the explanation should be left blank.

Specific Data Requirements Table		
Field	**DOs and DO NOTs**	**Examples and Explanations**
(SAI, EPI)	• **DO** follow the specific instructions in the SAI or EPI concerning not answered responses.	• There may be occasional circumstances when it is not possible to observe an event listed on an EPI. For example, an inspector may not observe an intoxicated passenger during an entire EPI. Specific instructions tell the inspector what to do when in these circumstances.
(SAI, EPI, DOR*) **Applies only to "Element-Based Observation" DOR*	• **DO NOT** enter a response if the question was not observed during the conduct of an activity and "N/A" is not an appropriate response.	• If the question's subject was not observed during the surveillance activity and the subject was applicable to the carrier, then the response should be left blank.
(SAI, EPI, DOR*) **Applies only to "Element-Based Observation" DOR*	• **DO NOT** enter a response if the question asks "Were written procedures consistent across manuals?" and only one manual was inspected.	• Entries must be responsive to the question.
(SAI, EPI, DOR)	• **DO NOT** enter a response if you are unsure whether something observed was unsatisfactory or potentially unsatisfactory.	• There is no "maybe" response. The inspector needs to do additional research and plan another activity to make a definitive determination if the correct response should be "Yes" or "No."
Response **"Yes"** (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*	• **DO** enter "Yes" to indicate the requirements were met.	• The DCT questions are written so that "Yes" is always a favorable response. • A "Yes" answer always indicates a positive response. Great care should be taken when determining if the response is positive. If the inspector indicates a positive answer using a qualifier (e.g. "Yes, but…") this may drive the answer to actually be a "No." In that case, the inspector should re-evaluate their comments and their answer to ensure it is not contrary to the "Yes" response. • Answer the question based on just what was observed during the activity.

Specific Data Requirements Table		
Field	**DOs and DO NOTs**	**Examples and Explanations**
Response **"Yes"** (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*		• SAI: A "Yes" response indicates that for the specific question being asked and for the particular SAI activity being observed, the operator complies with observed specific regulatory requirements (SRR) and applicable FAA guidance for that element. A "Yes" response for SAI also indicates the applicable safety attributes are incorporated into the operator's procedures. • EPI/DOR: A "Yes" response indicates that the specific question being asked, for the particular activity being observed, the operator complies with observed SRR and applicable FAA guidance for that element. Further, a "Yes" would indicate that the observed procedures and system safety principles approved/accepted for the air carrier are being followed.
"Yes" Comments (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*	• Yes comments are not mandatory. • Yes comments are associated with each specific question and not generalized for the entire activity. • Yes comments must meet all current Data Quality Guideline dimensions.	**Yes comments may describe:** • Which regulatory requirement was complied with. • Which FAA guidance was complied with. • Which air carrier procedure was followed. • Which system safety principle was observed. • Which air carrier controls or interfaces were observed. • Which manuals or records were reviewed. • Which applicable safety attributes are incorporated into an air carrier system or program.

Explanations are required for a "No" or "N/A" response.		
Field	**DOs and DO NOTs**	**Examples and Explanations**
Response **"No"** (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DORs*	• **DO** enter "No" to indicate the requirements were not met.	• The questions are written so that "No" always indicates a negative response to the question. • The significance of a "No" response depends on the specific DCT question that is being asked. • **SAI**: A "No" response on the specific question being asked, for the particular SAI activity being observed, may indicate that the operator either does not comply with observed specific regulatory requirements (SRR) and/or applicable FAA guidance for that element or that the operator's procedures do not incorporate the applicable safety attribute. A "No" response can also mean that system safety procedures are weak in the area being evaluated or that the operator's approved/accepted procedures are inadequate. • **EPI/DOR**: A "No" response on the specific question being asked, for the particular activity being observed, may indicate that the operator either does not comply with observed SRR and/or applicable FAA guidance for that element or that the operator's *procedures are not being followed*. A "No" response can also mean that system safety procedures are weak in the area being evaluated or that the operator's approved/accepted procedures are inadequate.

Explanations are required for a "No" or "N/A" response.		
Field	**DOs and DO NOTs**	**Examples and Explanations**
Response **"No"** (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*		• The intent was never that a single "No" answer would equate to an unsafe condition or a regulatory violation, unless that particular "No" has a regulatory basis and the inspector observed a possible violation or an unsafe condition.
Response **"N/A"** (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*	• **DO** enter "N/A" when a particular question does not apply to the air carrier's operation being evaluated.	• N/A" is an appropriate response if the question does not apply to the air carrier's type of operation, type of aircraft, or area of operation.
"No" Explanations (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*	• **DO** explain the reasons for your "No" response.	• An explanation of the who, what, where, when, how, and why that caused the "No" response must be entered. The explanation should be plain and comprehensible.
	• **DO** write your explanation so it is understandable.	• The explanation should be written in clear, concise language. • Abbreviations and non-defined acronyms used should be commonly understood within the aviation industry. • The DEPM should be able to read and understand what the explanation means. • Explanations should be complete and descriptive, with as much information as necessary for someone knowledgeable with the air transport industry to understand without requiring further information.
	• **DO** write your explanation so that it answers the question in a responsive way.	• The explanation must be pertinent to the question's intent. The explanation should have a logical, precise relevance to the matter at hand.

Explanations are required for a "No" or "N/A" response.		
Field	**DOs and DO NOTs**	**Examples and Explanations**
"No" Explanations (EPI) **Applies only to "Element-Based Observation" DORs*	• **DO** select appropriate Air Transport Association (ATA) codes.	• ATA codes should reflect the known primary and secondary aircraft systems that were identified as being related to the principle cause of the "No" response. Otherwise, the codes should be left blank.
	• **DO** write your explanation so that it is technically correct, reliable, and free of error.	• The explanation should be grammatically correct. • The explanation should be written with complete sentences that are punctuated and capitalized correctly. • The explanation should not contain spelling errors.
	• **DO** include references where appropriate.	• CFR and other references should be included in explanations.
	• **DO** make each explanation stand-alone.	• There is no direct link between the explanation for one question and another. Each explanation must stand-alone for effective analysis and reader understanding.
	• **DO NOT** refer to the explanation for another question.	• "See above" or "same as question 3" or "refer to the Tulsa Main Base Report" are all examples of references to avoid.
	• **DO NOT** use the explanation field to critique the ATOS process.	• The "Problem Reporting & Feedback" hyperlink is the proper avenue to use for improvement suggestions and reporting of deficiencies in ATOS.
	• **DO NOT** enter opinions in the explanation.	• The explanation should be statements of fact or fact-based conclusions. Fact-based conclusions are based on actual observations or facts rather than inspector opinions.

Explanations are required for a "No" or "N/A" response.		
Field	**DOs and DO NOTs**	**Examples and Explanations**
"No" Explanations (Continued) (SAI, EPI, DOR*, ConDOR)	• **DO NOT** enter the word "None" by itself in the explanation field.	• Entry of anything contrary to the ATOS Data Quality Guidelines degrades the quality and integrity of the data. Use of spaces, periods, or other characters by themselves to circumnavigate the requirement for an explanation will not be acceptable.
"N/A" Explanations (SAI, EPI, DOR*, ConDOR) **Applies only to "Element-Based Observation" DOR*	• **DO** explain the reasons for your "N/A" response.	• N/A" is an appropriate response if the air carrier's type of operation, type of aircraft, or area of operation does not apply. A factual statement must be entered as to why the response was "N/A" (e.g., ABC Airlines is not approved in their Operation Specification to conduct RVSM operations).
"**Comments**" **field** (DOR*, ConDOR) **Applies only to "Other Observation" DOR*	• **DO** enter what was observed in the course of the observation.	• Describe in detail what was observed and include all relative facts (i.e., who, what where, when, why, and how, as applicable). • Entries must be statements of fact or fact-based conclusions, based on actual observations.
	• **DO NOT** enter what actions the inspector conducted during the course of the observation.	• Inspectors should not enter a description of what they *did* to complete the particular inspection activity being reported.
"**Inspector Action Taken" field** (SAI, EPI, DOR, ConDOR)	• **DO** record actions taken by reporting inspectors as a result of the deficiencies observed.	• These actions may include notifying appropriate air carrier personnel of a potential noncompliance, consulting with air carrier or other FAA officials to obtain additional information, or initiating an enforcement investigation.
	• **DO NOT** enter a description of what was done during the observation.	• Inspectors should not enter a description of what they did to complete the particular inspection activity being reported.

Figure 8-1. Sample Letter Requesting Participation on a System Analysis Team (SAT).

U.S. Department
of Transportation
Federal Aviation
Administration

[Date]

[Air Carrier Address]

Dear [Appropriate Official]

As part of the FAA's Air Transportation Oversight System (ATOS) Implementation (action) process, the FAA may respond to an identified risk via several action plans. One is to convene a System Analysis Team (SAT) whose objective is a collaborative approach whereby the certificate holder, other non-FAA entities, and the FAA work together on significant safety matters to determine root cause(s) and solutions.

The [CMT] and [Certificate Holder] have agreed to convene an SAT to develop an action plan (see attachment) which will set milestone dates, assign the responsible company departments and personnel, and forecast completion dates, with the focus on [describe problem that the SAT was formed to address].

This initial meeting is scheduled for [date, time and location]. FAA participation will include [names and titles of participants from the FAA].

Thanks for your cooperation and this opportunity to effect tangible improvements to safety.

Sincerely,

[Signature and title of PI or Manager]

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Figure 8-2. System Analysis Teams

The System Analysis Team (SAT) process is used to develop and execute collaborative action plans to ensure certificate holders manage their risks. Personnel from the Federal Aviation Administration (FAA), the certificate holder, and other non-FAA entities work together to determine root causes and recommend possible solutions. The SAT process ensures that feedback concerning any actions taken is provided to applicable parties as part of the information sharing process. *The SAT process does not change any existing Flight Standards Enforcement Policies. SATs must be conducted in a manner that does not compromise FAA enforcement responsibilities.*

The Risk Management Plan (RMP) is the primary developing, reporting, and documenting tool in the SAT process. Throughout the implementation of the RMP the assigned Certificate Management Team (CMT) members perform periodic progress checks to monitor the completion and effectiveness of action items. Once the action items are completed, the SAT verifies that the overall action plan either eliminated the hazard or reduced the level of risk sufficiently so that no additional action is needed.

The following describes the tasks related to the SAT process:

a. Convene a SAT. The principal inspector (PI) decides when it is appropriate to convene a SAT.

b. Composition of SAT. The PI or designated person should request input from the certificate holder regarding SAT composition. Depending on the nature of the system problem, the SAT may be comprised of:

- CMT members
- Other FAA personnel
- Airline representatives
- Manufacturers' representatives
- Other industry personnel

(1) Request for participation. The PI or designated person contacts personnel from the certificate holder and the FAA to request their participation on the SAT. The certificate holder coordinates the participation with non-FAA participants, such as manufacturers' representatives or other industry personnel.

(2) Follow-up if initial request not accepted. If the certificate holder does not accept the initial request to participate on the SAT, the PI should send a written request for participation to the appropriate certificate holder management official. A sample letter requesting participation on an SAT is provided in figure 8-1, Sample Letter Requesting Participation on a System Analysis Team (SAT).

(3) Actions if participation is declined. If the identified personnel decline participation after a written request, PIs should notify their regional division manager, through their certificate-holding district office (CHDO)/certificate management office (CMO) manager. The regional division manager and the CHDO/CMO manager decide whether to:

- Contact a higher level of management of the declining organization; or
- Continue the SAT without the initially identified participants.

c. Develop, implement and validate the results of the RMP. The policy and procedures for the development, implementation, and validation of the results of a RMP are described in FAA Order 8400.10, appendix 6, chapter 8, paragraph 804. Detailed instructions for using the RMP automation tool are provided in the Risk Management User Guide. The PI or designated person coordinates with other appropriate parties of the SAT to:

- Determine the approach that will be used;
- Develop the RMP action items;
- Coordinate performance of the action items; and
- Determine if the RMP eliminated the hazard or reduced the risk level sufficiently so that no additional action is needed.

d. Provide feedback to applicable parties. As part of the information sharing process, after the RMP is complete, the PI or designated person communicates the results to all applicable parties.

Figure 9-1. ATOS FOIA Policies And Procedures

POLICY: Requests for Air Transportation Oversight System (ATOS) records made under the Freedom of Information Act (FOIA) will be processed in accordance with Federal Aviation Administration (FAA), Department of Transportation (DOT), and government-wide directives and guidance. All such requests and releasability determinations will therefore be processed under the authority and direction of the ATOS certificate management office (CMO).

BACKGROUND: FAA Order 1270.1, Freedom of Information Act Program, current edition, provides guidance governing the processing of requests for FAA records under FOIA. Order 1270.1 states, in part, that "Agency records possessed by the FAA are subject to the Act and must be made available to the public on request, unless specifically exempted or excluded by the FOIA. Reasonably segregable information will be provided from records which contain information that may be withheld. …[A]fter review by the program office releasable records may be made available for inspection and copying." Order 1270.1 also states that a record search and a releasability evaluation should be conducted by an individual who is familiar with the subject matter of the requested records.

There are nine exemptions under the FOIA that permit an agency to withhold records in whole or in part. "The appropriate program office must review each requested record to determine if the records or any reasonably segregable portion of the records fall within one of the nine exemptions." However, "[A]gency components should consider voluntarily releasing records which otherwise qualify for exemption if disclosure would not cause the agency harm that the relevant exemption sought to avoid." The FOIA favors disclosure and makes the withholding of even those records that clearly fall under the purview of one of the exemptions a discretionary act.

Regarding authority and responsibility, Order 1270.1 states that "[T]he heads of offices and services…are responsible for determining both the releasability of records under their purview and withholding records pursuant to properly applied exemptions or exclusions." The authority to release records may only be delegated to the division-head level. The authority to withhold a record in part or whole is vested in the heads of offices and services. This authority may not be delegated.

PROCEDURE: When a request for any ATOS-generated records is received by an ATOS CMO, the individual designated as the ATOS CMO FOIA point of contact (POC) will interface with the local FOIA coordinator for guidance and policy. The procedures in Order 1270.1 will be used in determining releasability of records. A copy of the response will be provided to the ATOS CMO at Dulles, VA.

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Figure 9-2. Memorandum Regarding Release of ATOS Documents

U.S. Department of Transportation
Federal Aviation Administration

Memorandum

Subj: ACTION: Protecting ATOS under the Freedom Of Information Act

Date: JUN 18 1998

From: Manager, AGC-110

To: Dave Hanley and Bob Carlisle
ATOS Workgroup Co-leaders

You requested our opinion concerning the protection of certain air carrier specific surveillance planning information from public release. You specifically requested our views on the protection of completed Air Carrier System Safety Analysis Tool (SSAT), the completed Air Carrier Assessment Tool (ACAT) and the completed Comprehensive Surveillance Work Pan (CSWP) of the Air Transportation Oversight System (ATOS). A member of my Branch met with your workgroup to discuss these issues and you provided us with a copy of the Improved Surveillance Planning Process Final Report.

Your basic concern was that the disclosure of the completed SSAT, ACAT or CSWP would allow carriers to anticipate and plan for agency surveillance, as opposed to consistently complying with the Federal Aviation Regulations, and thereby, undercut your ability to plan the surveillance of these carriers.

After reviewing all the information provided, it is our opinion that there is an argument to protect those particular elements pursuant to exemption 2 of the FOIA. 5 U.S.C. § 552(b)(2).[1] Exemption 2 protects predominately internal information where disclosure would significantly risk circumvention of a statute or agency regulation. The agency would need to show that release of the information would render the information "operationally useless" or compromise the utility of the program. In explaining how these elements would be at risk, you stated that if an air carrier knows its rating or score it will know whether they will be inspected annually or more frequently and what areas they could neglect or strengthen based on this information.[2]

[1] We note that there is an argument for protection under the FOIA. We cannot guarantee that a court would agree with our interpretation if subject to legal challenge.

[2] It is our understanding that ATOS differs from the Safety Performance Analysis System (SPAS) in this respect. It was never adequately explained to us from a factual/operational standpoint how release of specific SPAS information would risk circumvention of a statute or agency regulation.

There is also an argument that some of the information contained in these elements may also fall under exemption 5 protection. 5 U.S.C. § 552(b)(5). Exemption 5 protects "inter-agency or intra-agency memorandums or letters which would not be available to a party…in litigation with the agency." One recognized privilege under this exemption is the deliberative process privilege, which protects information that is both predecisional and deliberative in nature. However, all factual information must be released since that is not considered to be opinion or recommendation. You would need to review the elements and determine on a case-by-case basis whether certain information fell within exemption 5.

As we discussed, the best way to ensure protection of this information is to continue exploring the possibility of obtaining a legislative exemption for ATOS or certain aspects of ATOS.

/s/
LeAnne M. Faulkner